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# Inputs Used in U.S. Farm Production

## A Bibliography of Selected Economic Studies, 1950-80

Thomas Spinks  
Dale C. Dahl







INPUTS USED IN U.S. FARM PRODUCTION: A BIBLIOGRAPHY OF SELECTED ECONOMIC STUDIES, 1950-80. By Thomas Spinks and Dale C. Dahl. National Economics Division; Economics and Statistics Service; U.S. Department of Agriculture. Bibliographies and Literature of Agriculture No. 19.

ABSTRACT

This bibliography covers economic research reports prepared during 1950-80 on the inputs used in farm production. Categories of inputs include farm supply cooperatives, feed, fertilizer, finance, labor, land, machinery and buildings, pesticides, petroleum, seed, and water.

Keywords: Farm inputs, Input research, Input markets, Production inputs, Feed, Fertilizer, Finance, Labor, Machinery, Pesticides, Petroleum, Seed, and Water.

## PREFACE

This bibliography, one of the several publications developed as part of the work of the North Central Regional Research Committee (NCR-117), covers reports on inputs used in farm production. NCR publications are designed to meet one or more of these objectives: provide a survey of current literature on subjects of interest of the committee, indentify specific research objectives which may serve as guides to future research proposals, and produce reports and, if appropriate, regional publications which contain reviews of studies available or a set of summary recommendations regarding areas of research.

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### INTRODUCTION

This bibliography, an expanded and updated version of "Purchased Farm Input Markets in the United States, 1950-71: a Bibliography of Economic Studies," now includes inputs for agriculture (such as water, labor, and land) that have not been traditionally defined as purchased inputs. In addition, the category of petroleum has been expanded to include selected general energy studies. The studies in this publication focus on the supply, demand, price, and market structure for various inputs. The data sources searched include:

1. Journal of Economic Literature, American Economic Association, Pittsburg, Pennsylvania, 1970-79.
2. Books in Print, R.R. Bowker Company, New York, 1979.
3. Monthly Catalog of U.S. Government Publications, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 1970-79.
4. U.S. Department of Agriculture Current Research Information System, Division of Research and Statistics, (CRIS) projects, Washington, D.C.
5. Agriculture Finance Bibliography, Federal Reserve System, Division of Research and Statistics, Washington, D.C., November 1978.
6. University of Minnesota Libraries.
7. Dissertation Abstracts, University Microfilms, Ann Arbor, Michigan, 1950-79.
8. Master's Theses Abstracts, University Microfilms, Ann Arbor, Michigan, 1970-79.

9. Lists of department publications and masters theses from college and university departments of agricultural economics (not all departments included).
10. Catalog of the National Agricultural Library, Phoenix, Arizona, The Oryx Press for the U.S. Department of Agriculture, through November 1979.

This bibliography has been organized by input category and type of publication. Each of the 12 sections covers an individual input, while subsections list the studies by type of publication. The inputs are listed alphabetically as follows: Labor, land, machinery and buildings, pesticides, petroleum, seed, and water. The types of publications are listed under each section as follows: Books, journal articles, U.S. Department of Agriculture, experiment stations, Ph.D. dissertations, M.S. theses, ongoing Current Research Information Systems (CRIS) projects, and recently completed Current Research Information System (CRIS) projects. We do not claim to include all studies pertaining to input markets in agriculture, although each source of data was thoroughly searched.

The authors wish to thank the staffs of colleges and universities that participated in compiling this bibliography by furnishing recent publication lists as well as lists of master's theses and Ph.D. dissertations completed from 1950 to 1979.

## INPUTS, GENERAL LITERATURE

### Books

1. Dahl, D. C., and J. W. Hammond. Market and Price Analysis: The Agricultural Industries. New York, N.Y.: McGraw-Hill Book Co., 1977.
2. Heady, Earl O., and Luther G. Tweeten. Resource Demand and Structure of the Agricultural Industry. Ames, Iowa: Iowa State Univ. Press, 1963.
3. Moore, John R., and Richard G. Walsh. Market Structure of the Agricultural Industries. Ames, Iowa: Iowa State Univ. Press, 1966.
4. Phillips, Richard. Managing for Greater Returns in County Elevator and Retail Farm Supply Business. Des Moines, Iowa: Farmers' Grain Dealers Association of Iowa, 1957.

5. Roy, E. P., F. L. Carty, and G. D. Sullivan. Economics: Applications to Agriculture and Agribusiness. Danville, Ill.: The Interstate Printers & Pub. Inc., 1971.
6. Wilcox, W. W., W. W. Cochrane, and R. W. Herdt. Economics of American Agriculture, 3rd ed. Chapter 20: "Farm Inputs, Credits, and Finance." Englewood Cliffs, N.J.: Prentice Hall Inc., 1974, pp. 370-90.

### Journals

1. Aines, R. "Economic Development Through Agri-Business Consortia," American Journal of Agricultural Economics, Vol. 50, No. 5 (Dec. 1968), pp. 1345-50.
2. Allen, G. R. "Changing Structure of the Farm Input Industry: Organization, Scale, Ownership: Discussion," American Journal of Agricultural Economics, Vol. 52, No. 5 (Dec. 1970), pp. 686-87.
3. Anderson, D. G., and D. L. Helgeson. "Cost Implications of Diversified Distribution and on Outlets for Purchased Farm Inputs," Nebraska Journal of Economics and Business, Vol. 13, No. 3 (summer 1974), pp. 19-33.
4. Araj, A. A. "The Effect of Vertical Integration on the Production Efficiency of Beef Cattle Operations," American Journal of Agricultural Economics, Vol. 58, No. 1 (Feb. 1976), pp. 101-04.
5. Auerbach, R. "The Effects of Price Supports on Output and Factor Prices in Agriculture." Journal of Political Economy, Vol. 78, No. 6 (Nov.-Dec. 1970), pp. 1355-61.
6. Babb, E. M., and L. A. Lumpkin. "Projecting Performance of Farm Supply Retailing Firms Using Simulation Techniques," American Journal of Agricultural Economics, Vol. 58, No. 2 (May 1976), pp. 317-20.
7. Biedermann, K. "Discussion of Market Implications," American Journal of Agricultural Economics, Vol. 58, No. 2 (May 1976), pp. 299-301.
8. Binswanger, H. P. "A Cost Function Approach to the Measurement of Elasticities of Factor Demand and Elasticities of Substitution," American Journal of Agricultural Economics, Vol. 56, No. 2 (May 1974), pp. 377-86.



9. Breimyer, H. F. "Agriculture's Three Economies in a Changing Resource Environment," American Journal of Agricultural Economics, Vol. 60, No. 1 (Feb. 1978), pp. 37-47.
10. Buck, R. K. "Improving the Delivery System for Farm Inputs: Discussion," American Journal of Agricultural Economics, Vol. 52, No. 5 (Dec. 1970), pp. 688-89.
11. Dahl, D. C. "Structure of Input Supplying Industries and Techniques of Analysis," American Journal of Agricultural Economics, Vol. 51, No. 5 (Dec. 1969), pp. 1046-54.
12. \_\_\_\_\_. "The Impact of Trends in Farm Production Units on the Input Supplying Industries," Emerging and Projected Trends Likely to Influence the Structure of Midwest Agriculture, 1970-1985, Agricultural Law Center Monography 11, Iowa City: Univ. of Iowa (June 1970), pp. 74-85.
13. \_\_\_\_\_. "Public Policy Changes Needed to Cope with Changing Structure," American Journal of Agricultural Economics, Vol. 57, No. 2 (May 1975), pp. 206-13.
14. \_\_\_\_\_. "Changing Structure of the Farm Input Industry: Organization, Scale, Ownership: Discussion," American Journal of Agricultural Economics, Vol. 52, No. 5 (Dec. 1970), p. 687.
15. Dennis, C. C. "Policies and Regulations Needed in the Input Industries: Discussion," American Journal of Agricultural Economics, Vol. 52, No. 5 (Dec. 1970), p. 691.
16. Doutriaux, J., and R. G. Zind. "Factor Input Efficiency and Technological Bias with Application to U.S. Agriculture," Review of Economics and Statistics, Vol. 58, No. 3 (Aug. 1976), pp. 380-82.
17. Eidelman, M. "Methodological Problems in Defining a National Economic Agroindustrial Complex," Problems of Economics, Vol. 19, No. 3 (July 1976), pp. 22-44.
18. Eldridge, Eber, C. Phillip Baumel, and Don Nelson. "One-Stop Agri-Business Centers: What Impact on Iowa Communities." Iowa Farm Science, Vol. 24, No. 10, Apr. 1970, pp. 3-7.



19. Fan, L. S. "A Conceptual Framework for Analyzing Economies of Vertical Integration," American Journal of Agricultural Economics, Vol. 52, No. 2 (May 1970), p. 333.
20. Floyd, J. E. "The Effects of Price Supports on Output and Factor Prices in Agriculture. A Reply," Journal of Political Economy, Vol. 80, No. 6 (Nov.-Dec. 1972), pp. 1317-19.
21. Folse, C. L., and W. W. Riffe. "Changing Patterns of Business Services and Population in Illinois Rural Villages," Illinois Agricultural Economics, Vol. 9, No. 1, Jan. 1969, pp. 76-82.
22. Galloway, L. W. "Improving the Delivery System for Farm Inputs: Discussion," American Journal of Agricultural Economics, Vol. 52, No. 5 (Dec. 1970), pp. 689-90.
23. Gardner, B. D. "Discussion: Measuring Input Changes in Agriculture," Journal of Farm Economics, Vol. 42, No. 5 (Dec. 1960) pp. 1430-33.
24. Glaeser, M. G. "Changing Patterns of Competition: Discussion," American Economic Review, Vol. 46, No. 2 (May 1956), pp. 548-50.
25. Grabowski, H. G. "The Determinants of Industrial Research Development: A Study of the Chemical Drug and Petroleum Industries," Journal of Political Economy, Vol. 76, No. 2 (Mar.-Apr. 1968), pp. 292-306.
26. Griliches, Z. "The Demand for Inputs in Agriculture and a Derived Supply Elasticity," Journal of Farm Economics, Vol. 41, No. 2 (May 1959), pp. 309-22.
27. Hazell, P. B. R. "Endogenous Input Prices in Linear Programming Models," American Journal of Agricultural Economics, Vol. 61, No. 3 (Aug. 1979), pp. 476-81.
28. Hoffman, A. C. "Structural Changes in the Food Industry; Implications for Future Public Policy: Discussion," American Journal of Agricultural Economics, Vol. 57, No. 2 (May 1975), pp. 216-18.
29. Johnson, S. R. "Agricultural Sector Models and Their Interface with the General Economy: Discussion," American Journal of Agricultural Economics, Vol. 59, No. 1 (Feb. 1977), pp. 133-36.

30. Just, R. E. "Agricultural Sector Models and Their Interface with the General Economy," American Journal of Agricultural Economics, Vol. 59, No. 1 (Feb. 1977), pp. 137-40.
31. Kau, P., and L. Hill. "A Threshold Model of Purchasing Decisions," Journal of Marketing Research, Vol. 9, No. 3 (Aug. 1972), pp. 264-70.
32. Krause, K. R., and L. R. Kyle. "Economic Factors Underlying the Incidence of Large Scale Farming Units: The Current Situation and Probable Trends," American Journal of Agricultural Economics, Vol. 52, No. 5 (Dec. 1970), pp. 748-61.
33. Ladd, G. W., and M. B. Martin. "Prices and Demand for Input Characteristics," American Journal of Agricultural Economics, Vol. 58, No. 1 (Feb. 1976), pp. 21-30.
34. Lau, L. J., and P. A. Yotopoulos. "Profit, Supply, and Factor Demand Functions," American Journal of Agricultural Economics, Vol. 54, No. 1 (Feb. 1972), pp. 11-18.
35. Logan, S. H. "A Conceptual Framework for Analyzing Economics of Vertical Integration," American Journal of Agricultural Economics, Vol. 52, No. 2 (May 1970), pp. 334-35.
36. \_\_\_\_\_. "A Conceptual Framework for Analyzing Economics of Vertical Integration," American Journal of Agricultural Economics, Vol. 51, No. 4 (Nov. 1969), pp. 834-48.
37. Lowe, J. W. "The IFC and the Agribusiness Sector," Finance and Development, Vol. 14, No. 1 (Mar. 1977), pp. 25-28.
38. Martin, N. R. "Stepped Product Demand and Factor Supply Functions in Linear Programming, Analyses," American Journal of Agricultural Economics, Vol. 54, No. 1 (Feb. 1972), pp. 116-20.
39. Masucci, R. H. "Discussion: Measuring Input Changes in Agriculture," Journal of Farm Economics, Vol. 42, No. 5 (Dec. 1960), pp. 1427-30.
40. Mather, L. L. "Policies and Regulations Needed in Input Industries: Discussion," American Journal of Agricultural Economics, Vol. 52, No. 5 (Dec. 1970), pp. 691-92.

41. Meiling, C. O. "Non-Farm Inputs as a Source of Agricultural Productivity," Stanford University Food Research Institute, Vol. 3 (Nov. 1962), pp. 217-21.
42. Minden, A. J. "Changing Structure of the Farm Input Industry Organization, Scale, Ownership," American Journal of Agricultural Economics, Vol. 52, No. 5 (Dec. 1970), pp. 678-86.
43. Morozov, F. "Structural Problems in the Formation of an Agroindustrial Complex," Problems of Economics, Vol. 16, No. 5 (Sept. 1973), pp. 72-93.
44. Neiuwoudt, W. L. "Input Subsidies for Variable Resources in Agriculture," Canadian Journal of Agricultural Economics, Vol. 20, No. 2 (July 1972), pp. 118-19.
45. Pickler, E. B. "Economic Factors Underlying the Incidence of Large Scale Farming Units: The Current Situation: Discussion," American Journal of Agricultural Economics, Vol. 52, No. 5 (Dec. 1970), p. 61.
46. Purcell, W. D. "An Approach to Research on Vertical Coordination: The Beef System in Oklahoma," American Journal of Agricultural Economics, Vol. 55, No. 1 (Feb. 1973), pp. 65-68.
47. Quance, L., and L. Tweeten. "Simulating the Impact of Input Price Inflation on Farm Income," Southern Journal of Agricultural Economics, Vol. 3, No. 1 (Dec. 1971), pp. 51-57.
48. Rask, N. "The Impact of Selective Credit and Price Policies on the Use of New Inputs," Development Digest, (Apr. 1971), pp. 49-54.
49. Ripley, F. C., and L. Segal. "Price Determination in 395 Manufacturing Industries," Review of Economics and Statistics, Vol. 55, No. 3 (Aug. 1973), pp. 263-71.
50. Ryan, J. G. "The Impact of Input Price Inflation on the U.S. Farming Industry," Canadian Journal of Agricultural Economics, Vol. 20, No. 3 (Nov. 1972), pp. 58-61.
51. Scofield, W. "Analyzing the Structure of Agribusiness Relations," Journal of Farm Economics, Vol. 48, No. 5 (Dec. 1966), pp. 1379-90.



52. Scoville, O. J. "The Agribusiness Sector-An Important Link in Economic Growth Models," American Journal of Agricultural Economics, Vol. 55, No. 3 (Aug. 1973), pp. 520-23.
53. Sherman, R., and J. D. Willet. "Potential Entrants Discourage Entry," Journal of Political Economy, Vol. 75, No. 4 (Aug. 1967), pp. 400-03.
54. Tweeten, L., and L. Quance. "Reply: The Impact of Input Price Inflation on the U.S. Farming Industry," Canadian Journal of Agricultural Economics, Vol. 20, No. 3 (Nov. 1972), pp. 63-64.
55. \_\_\_\_\_. "The Impact of Input Price Inflation on the U.S. Farming Industry," Canadian Journal of Agricultural Economics, Vol. 19, No. 3 (Nov. 1971), pp. 35-49.
56. Waldo, A. D. "Economic Factors Underlying the Incidence of Large Scale Farming Units: The Current Situation: Discussion," American Journal of Agricultural Economics, Vol. 52, No. 5 (Dec. 1970), pp. 762-63.
57. Williams, W. F. "Economic Factors Underlying the Incidence of Large Scale Farming Units: The Current Situation: Discussion," American Journal of Agricultural Economics, Vol. 52, No. 5 (Dec. 1970), pp. 761-62.
58. Wright, D. J. "The Natural Resource Requirements of Commodities," Applied Economics, Vol. 7, No. 1 (Mar. 1975), pp. 31-39.
59. Yotopoulos, P. A. "From Stock to Flow Capital Inputs for Agricultural Production Functions--A Micro-Analytic Approach," Journal of Farm Economics, Vol. 49, No. 2 (May 1967), pp. 476-91.

U.S. Department  
of Agriculture

1. Allen, G. C., and others. Structure of Six Farm Input Industries: Petroleum, Farm Machinery and Equipment, Fertilizers, Chemicals, Pesticides, Livestock Feed, Farm Credit. ERS-357. U.S. Dept. Agr., Econ. Res. Serv., Jan. 1968.
2. Breimyer, H. F. Markets, Market Structure and Institutional Organization of Agriculture. AMS-499. U.S. Dept. Agr., Agr. Mktg. Serv., Apr. 1963.

3. Hamm, L. G. "Farm Input Industries and Farm Structure,"  
Structure Issues in American Agriculture. AER-438.  
U.S. Dept. Agr., Econ. Stat. Coop. Serv., Nov. 1979.
4. Knapp, J. G. Capper-Volstead Impact on Cooperative  
Structure, FCS Info.-97. U.S. Dept. Agr., Farmer Coop.  
Serv., Feb. 1975.
5. Reimund, D. A. Farming and Agribusiness Activities of  
Large Multiunit Firms. ERS-591. U.S. Dept. Agr., Econ.  
Res. Serv., Mar. 1975.
6. Rinear, E. H. The Hatchery Industry: Structure-Economics  
Changes-Problems. MRR-483. U.S. Dept. Agr., Agr.  
Mktg. Serv., June 1961.
7. Scofield, W. H. Agribusiness Notes--Part 1--Manufactured  
Production Inputs and Agricultural Production. U.S.  
Dept. Agr., Econ. Stat. Coop. Serv., June 1978.
8. U.S. Department of Agriculture, Agricultural Marketing  
Service. Production Expenses of Farm Operators by  
States, 1949-1958. AMS-85, Oct. 1959.
9. \_\_\_\_\_, Economics, Statistics, and Cooperatives  
Service. Cooperatives in Agribusiness. Circ. Info.  
R-5, Dec. 1978.
10. \_\_\_\_\_, Economic Research Service. "Inputs,"  
Agricultural Outlook. AO-1, June 1975.

#### Experiment Stations

1. Anderson, D. G. Economies of Size, Volume and  
Diversification in Retail Grain and Farm Supply  
Businesses. Nebr. Agr. Exp. Sta. Res. Bull. 261, Apr.  
1974.
2. Anderson, J. D., D. C. Dahl, and R. D. Peterson.  
Purchased Farm Inputs in the North Central Region: A  
Descriptive Analysis of Selected Markets. Univ. of  
Minn. Agr. Exp. Sta. MR-109, fall 1971.
3. Connor, L. J. and others. Farm Supplies. Mich. Agr. Exp.  
Sta. Res. Rep. 182, Jan. 1973.
4. Covin, J. P. The Economic Environment Confronting  
Agricultural Industries. Ill. Agr. Exp. Sta. AE-3645,  
Jan. 1961.



5. Davulis, J. P., R. A. Andrews, and G. E. Frick. Effect of Dairy Farm Size and Spatial Density on Regional Marketing Costs and Supply Firm Resource Use. N. H. Agr. Exp. Sta. Res. Rep. 36, May 1974.
6. Gnauck, B. G., and D. C. Dahl. Government Regulations of the Farm Supply Industries. Minn. Agr. Exp. Sta. Bull. 492, 1970.
7. Greer, R. C. The Organization and Structure of Farm Supply Firms in Montana. Mont. Agr. Exp. Sta. Res. Rep. 11, Nov. 1971.
8. Harper, W. A. Interrelationships Between Farm and Non-Farm Industries with Special Reference to Area 4A of Georgia. Ga. Agr. Exp. Sta. Res. Rep. 80, June 1970.
9. Harrison, H., and G. Devino. Agribusiness Management: A Computerized Financial Information System for the Farm Supply Industry. Univ. of Mo., Columbia Agr. Exp. Sta. MR-345, 1973.
10. Henning, G. F., and R. E. Loubis. Financial Structure of Agricultural Business Organizations. Ohio Agr. Exp. Sta. Res. Bull. 881, May 1961.
11. Illinois Agricultural Experiment Station. Proceedings of the First Annual Forum, January 28-29, 1959. Agricultural Industries AE-3417, Jan. 1959.
12. \_\_\_\_\_. Proceedings of the Third Agricultural Industries Forum, Meeting Changes in Agriculture and Industry: General Sessions, January 31 to February 1, 1961. AE-3645, Apr. 1961.
13. \_\_\_\_\_. Proceedings of the Fourth Agricultural Industries Forum, Meeting Changes in Agriculture and Industry: Buildings and Equipment, Feed and Fertilizer, January 30-31, 1962. AE-3763, Jan. 1962.
14. Iowa State University. Structural Changes in Commercial Agriculture. Center for Agriculture and Economic Adjustment CAED Rep. 24, 1965.
15. \_\_\_\_\_. Implications of Changes (Structural and Market) on Farm Management and Marketing Research. Center for Agriculture and Economic Adjustment CAED Rep. 29, 1967.

16. Kohls, R. L. Farmers' Behavior and Decisions in Purchasing Farm Supplies. Ind. Agr. Exp. Sta. Res. PR 3, Feb. 1962.
17. Kyle, L. R. Farmer as an Input Buyer. Mich. State Univ. Ext., Mich. Farm Econ. 341, June 1971.
18. Larzelere, H. E., and R. M. King. Ratios as Measuring Sticks for Elevator and Farm Supply Organizations. Mich. Agr. Exp. Sta. Bull. 380, Aug. 1952.
19. Manning, T. W., and E. F. Koller. Minnesota Farm Supply Associations. Minn. Agr. Exp. Sta. Bull. 421, June 1953.
20. Marketing Research Committee and Farm Management Research Committee of the Western Agricultural Economics Research Council. Farm Management in the West--Problems in Economic Growth--The Structure of Factor Markets. Proceedings of a Joint Conference, San Francisco, Calif. Rep. No. 7, Nov. 1966.
21. Roy, E. P. Cost of Farm Supplies to Louisiana Farmers. La. Agr. Exp. Sta. DAE Circ. 310, Apr. 1962.
22. Shepherd, G., R. Beneke, R. Heifner, and W. Uhrig. Controlling Agricultural Production by Controlling Inputs. Mo. Agr. Exp. Sta. Bull. 791, July 1963.
23. Taylor, M. C., D. L. Herbert, and K. P. Suta. Prices Received and Prices Paid by Montana Farmers and Ranchers. Mont. Agr. Exp. Sta. Bull. 672, July 1975.
24. Tewksbury, D. K., and G. W. Erlandson. Price Behavior of Purchased Farm Inputs 1970-76. N. Dak. Agr. Exp. Sta. 35 (1), Sept./Oct. 1977.
25. Texas Agricultural Experiment Station. Rules and Regulations Adopted by the Texas Feed and Fertilizer Control Service Under the Texas Commercial Fertilizer Act of 1961. MP-552, Nov. 1964.
26. Tweeten, L. G., and S. Griffin. General Inflation and the Farming Economy. Okla. Agr. Exp. Sta. Res. Rep. P-732, Mar. 1976.
27. Ziemer, R. F., W. N. Musser, and I. D. Clifton. Agricultural Input Use and Potential Water Pollution Associated With Irrigation in Georgia. Ga. Agr. Exp. Sta. Res. Bull. 222, Aug. 1978.

Ph.D. Dissertations

1. Bohl, L. P. "An Analysis of the Behavior of Firms Supplying Purchased Inputs to Agriculture: An Experimental Approach." Ph.D. Dissertation. Purdue Univ., 1971.
2. Burkes, Marshall Roy. "Changes in the Financial Strength and Structure of Agricultural Business Organizations." Ph.D. Dissertation. Ohio State Univ., 1963.
3. Dahl, Dale Curtis. "Employment and Income in the Agribusiness Sector of the Minnesota Economy." Ph.D. Dissertation. Univ. Minn., 1964.
4. Gilbert, Howard Alden. "An Integration of Market Structure Theory and Decision Making in Selected Agricultural Industries." Ph.D. Dissertation. Oreg. State Univ., 1967.
5. Gnauck, Brian George. "An Economic Analysis of Market Conduct in Five Agricultural Input Industries." Ph.D. Dissertation. Univ. Minn., 1968.
6. Graves, D. R. "Optimum Number, Size, and Location of Non-Durable Agricultural Input Supply Facilities in Selected Areas of Indiana." Ph.D. Dissertation. Purdue Univ., 1972.
7. Haskell, James E. "Optimum Size and Number of Farm Petroleum Distribution Facilities in Kansas: A Study of Plant and Distribution Costs." Ph.D. Dissertation. Kans. State Univ., 1970.
8. Helgeson, D. L. "Cost Implications of Multiple-Product Farm Supply Retailing." Ph.D. Dissertation. Univ. Neb., 1971.
9. Lin, An-Yhi. "Factor Demand in the United States Agriculture: Econometric Simulation." Ph.D. Dissertation. Iowa State Univ., 1967.
10. Robbins, L. W. "Warehousing Agricultural Inputs in Michigan: An Economics of Size and Location Analysis." Ph.D. Dissertation. Mich. State Univ., 1975.
11. Rockne, Donald Christain. "Farmer Behavior and Decision Making in Purchasing Supplies." Ph.D. Dissertation. Purdue Univ., 1965.



12. Whitehair, Norman Vincent. "Measuring Financial Performance of Cooperative Grain and Supply Firms in Indiana." Ph.D. Dissertation. Purdue Univ., 1964.
13. Williamson, Robert Burns. "Electric Retail Rate Increases and Farmers' Use of Electricity." Ph.D. Dissertation. American Univ., 1958.

#### M.S. Theses

1. Adams, B. M. "Economic Effect on Agricultural Production of Alternative Energy Input Prices: Texas High Plains." M.S. Thesis. Tex. A & M Univ., 1975.
2. Berry, James E. "Conventional and Unconventional Determinants of Market Performance." M.S. Thesis. Univ. Ky., 1964.
3. Dalsted, N. L. "Pecuniary Economies of Farm Size in Northern East Central North Dakota." M.S. Thesis. N. Dak. State Univ., 1972.
4. Daouk, Bashir. "Relations Between Agriculture and Industry and in a Progressive Economy." M.S. Thesis. Univ. Wis., 1954.
5. Fabiyi, E. A. "Changes in Input, Output, and Productivity of Oregon Farms." M.S. Thesis. Oreg. State Univ., 1969.
6. Forugeron, K. G. "Budgeting and Cash Flow Planning: A Management Tool for Grain and Farm Supply Business." M.S. Thesis. Univ. Neb., Dec. 1973.
7. Giacomini, T. A. "Discounts of Farm-Inputs in Eastern Colorado." M.S. Thesis. Colo. State Univ., 1971.
8. Gifford, John. "Selling and Purchasing Decisions of Farmers (Hogs and Farm Machinery)." M.S. Thesis. Purdue Univ., 1956.
9. Hoffman, Earle Samuel. "Trends in Agriculture's Reliance on Non-Agricultural Factors." M.S. Thesis. Iowa State Univ., 1960.
10. Holm, Paul L. "Marketing Channels Utilized by Nebraska Farmers in Selling Their Products and Buying Supplies." M.S. Thesis. Univ. Neb., 1955.
11. Hopp, G. W. "Multiple-Enterprise Retail Farm Supply Firms: Cost Effects of Alternative Sizes, Volumes, and Combinations of Enterprises." M.S. Thesis. Univ. Neb. (Unpub.), 1973.

12. Hubbard, John W. "A Study of the Decision Making of Farm Managers in Relation to Outputs and Specific Inputs." M.S. Thesis. Univ. Ky., 1957.
13. Jones, John R. "An Economic Analysis of Capital Requirements, and Credit Practices on Farms Producing Hatching Eggs in the Southern Mountain Area of North Carolina." M.S. Thesis. N.C. State Univ., 1955.
14. Kniep, M. D. "A Financial Data Summary and Analysis System for the Farm Supply Firm." M.S. Thesis. Univ. Neb., 1974.
15. Lane, George Henry. "The Farm Supply Market of Hamblen County, Tennessee." M.S. Thesis. Univ. Tenn., 1960.
16. Langley, L. H., Jr. "An Input-Output Analysis of Georgia's Agribusiness Industry." M.S. Thesis. Univ. Ga., 1972.
17. Lippke, L. A. "Interindustry Analysis of the Economy of Northeast Texas Emphasizing Agriculture." M.S. Thesis. Tex. A & M, 1971.
18. Lumpkin, L. A. "Analysis of Market Structure and Performance in the Farm Supply and Food Retailing Industries Using Simulation Techniques." M.S. Thesis. Purdue Univ., 1974.
19. Menegay, M. R. "Communication Patterns of 100 Tennessee Farm Supply Dealers." M.S. Thesis. Univ. Tenn., 1973.
20. Mitton, Wm. Eldridge. "An Economic Analysis of Sidelines in Country Grain Elevators." M.S. Thesis. Univ. Minn., 1960.
21. Pederson, John R. "Economies of Scale in Turkey Hatcheries." M.S. Thesis. Univ. Md., 1965.
22. Peterson, T. N. "A Study of Factor Input Services in Cache County, Utah, 1969." M.S. Thesis. Utah State Univ., 1971.
23. Piascik, S. J. "Inflation and Indebtedness in Certain Industries Related to Agriculture." M.S. Thesis. Univ. Calif., Dec. 1978.
24. Pitt, W. D., Jr. "Agribusiness in the Tennessee Economy." M.S. Thesis. Univ. Tenn., Dec. 1976.



25. Rollins, Franklin D. "An Inquiry into the Marketing of Broiler Hatching Eggs in Massachusetts." M.S. Thesis. Univ. Mass., 1970.
26. Schwartz, D. R. "A Feasibility Model for Farm Supply Firm Mergers." M.S. Thesis. S. Dak. State Univ., 1971.
27. Sturtevant, R. "A Linear Programming Analysis of Specific Organization and Diversification Alternatives of an Agricultural Supply Firm." M.S. Thesis. Univ. Mass., 1967.
28. West, Jerry. "A Pilot Study of Farmer's Preferences for Marketing Services in Kingfisher County, Oklahoma." M.S. Thesis. Okla. State Univ., 1955.
29. Wiebe, Jacob Edwin. "Implications of the Changing Input Mix on Selected Type of Farming Situations." M.S. Thesis. Kans. State Univ., 1967.
30. Yadav, R. P. "An Econometric Analysis of the Demand for Selected Agricultural Inputs in Oregon." M.S. Thesis. Oreg. State Univ., 1972.

Ongoing Current  
Research Infor-  
mation System  
(CRIS) Projects

1. Andrews, R. A. "Impact of the Changes in Marketing Channels on the New Hampshire Agricultural Sector." Univ. N.H., Durham, N.H. Period: 11-6-73 to 9-30-80. Objectives: Describes service areas of farm supply marketing firms; relates farm firms to input and product marketing firms; develops flow of farm products through market channels and evaluates assembly and distribution functions; enumerates marketing practices that influence market availability; and evaluates adequacy of markets and market channels for meeting current and prospective needs.
2. Folwell, R. J. "Impact of Changes in World Food Supply-Demand Conditions Upon Selected Agricultural Factor Markets." Wash. State Univ., Pullman, Wash. Period: 7-1-74 to (open). Objectives: To develop a set of projections to the year 1980 by selected commodity categories of the agricultural outputs of Washington based on current U.S. and foreign supply and demand conditions for food and fiber; estimate input usage to achieve the projected agricultural production, considering probable price and availability of farm inputs; determine the adaptability of the existing agricultural input market organization to meet

projected changes in agricultural output and, in the case of inadequate input market structure, to suggest alternative organization.

3. Greer, R. C. "Effects of Market Structure and Organization Changes and Regulation on Producer Buying and Selling." Mont. State Univ., Bozeman, Mont. Period: 2-18-77 to 9-30-82. Objectives: Describes the changing organization, structure, and functions of selected agricultural input and output markets in Montana; identifies and evaluates alternative producer policies for buying selected agricultural inputs and selling selected agricultural outputs under conditions of risk and uncertainty; and assesses the impact of various regulations on the structure and organization of agricultural input and output markets in Montana, producer buying and selling policies, and selected agricultural product flows.
4. \_\_\_\_\_. "Impact of Changes in World Food Supply-Demand Upon Selected Agricultural Factor Markets." Mont. State Univ., Bozeman, Mont. Period: 7-1-74 to (open). Objectives: Estimates input usage to achieve projected agricultural production, considering probable price and availability of farm inputs; and determines adaptability of existing agricultural input market organization to meet projected changes in agricultural output.
5. St. Clair, J. S. "Impact of Changes in World Food Supply-Demand Upon Selected Agricultural Markets." Univ. Wyo., Laramie, Wyo. Period: 7-1-74 to (open). Objectives: Projects agricultural output to the year 1980; estimates input usage needed to achieve projected agricultural production; and determines adaptability of the existing agricultural input market organization to meet projected changes in agricultural output.

Completed Current  
Research Infor-  
mation System  
(CRIS) Projects

1. Anderson, D. G. "Impact of Changes in World Food Supply-Demand Upon Selected Agricultural Markets." Univ. Neb., Lincoln, Neb. Period: 8-27-71 to 6-30-77. Objectives: Estimated input usage to achieve projected agricultural production based on probable price and availability of farm inputs; determined the adaptability of the existing agricultural input market organization to meet projected changes in agricultural output; and suggests alternative organization in case input market structure is found to be inadequate.

2. Carman, H. F. "Impact of Changes in World Food Supply-Demand Conditions Upon Selected Agricultural Factor Markets" Univ. Calif., Davis, Calif. Period: 7-1-69 to 9-30-77. Objectives: Developed a set of projections to the year 1980 by broad (selected) commodity categories of the agricultural output of the West, taking into consideration current U.S. and foreign supply and demand conditions for food and fiber; estimated input usage needed to achieve the projected agricultural production, considering probable price and availability of farm inputs; determined the adaptability of the existing agricultural input market organization to meet projected changes in agricultural output; and suggests alternative organization in case input market structure is found to be inadequate.
3. Dahl, R. P. "Adequacy and Cost Effectiveness of Bulk Commodity Transportation Systems." Univ. Minn., St. Paul, Minn. Period: 4-6-77 to 10-5-79. Objectives: Determined the adequacy of the transportation system for outbound shipments of grains, soybeans, and soybean products and for obtaining and distributing agricultural inputs, such as fertilizer and fuel; investigated potential shifts in marketing patterns or sources of production inputs due to changes in transportation costs, Government regulations, transportation facilities, terminals, and ports; and recommended appropriate policy and investment changes from the private and public sectors.
4. Devino, G.T. "Organization and Management of Farm Supply Firms." Univ. Mo., Columbia, Mo. Period: 1-24-72 to 9-30-78. Objectives: Identified and evaluated the potential impact on firms of changes in structure and operating methods of farm supply industries; and developed and tested management practices and procedures for farm supply industry firms.
5. Long, R. B. "Impact of Changes in World Food Supply-Demand Demand Conditions Upon Selected Agricultural Factor Markets." Univ. Idaho, Moscow, Idaho. Period: 1-1-74 to 9-30-77. Objectives: Estimated input usage needed to achieve projected agricultural production based on probable price and availability of farm inputs.
6. Payne, W. F. "Impact of Changing Transportation Systems on Grain and Farm Supply Marketing Firms." S. Dak. State Univ., Brookings, S. Dak. Period: 7-1-74 to 9-30-77. Objectives: Estimates the quantities of grain that will move through South Dakota country



elevators and commercial channels in 1980; estimate South Dakota's demand for feedgrains, processed feed, and fertilizer in 1980; project alternate changes in grain transportation for South Dakota; and determine the economic feasibility of alternative modes of grain movement from producers to shipment destinations.

7. Peterson, R. D. "Impact of Changes in World Food Supply-Demand Conditions Upon Selected Agricultural Factor Markets." Colo. State Univ., Fort Collins, Colo. Period: 7-1-70 to 6-30-77. Objectives: Developed a set of projections to the year 1980 by broad (selected) commodity categories of the agricultural output of Colorado as they relate to the West, taking into consideration current U.S. and foreign supply and demand conditions for food and fiber; estimated the agricultural input usage in Colorado as it relates to the West, to achieve projected agricultural production, consider probable price and availability of farm inputs; determined the adaptability of Colorado's existing agricultural input market organization as it relates to the West, to meet projected changes in agricultural output; and suggests alternative organization in case input market structure is found to be inadequate.

#### FARM SUPPLY COOPERATIVES

##### Books

1. Abrahamsen, Martin Abraham, and Claude L. Scroggs. Agricultural Cooperation; Selected Readings. Minneapolis, Minn.: Univ. Minn., 1957.
2. Roy, Ewell Paul. Cooperatives Today and Tomorrow. Danville, Ill.: The Interstate Printers & Pub. Inc., 1964.
3. Valko, Laszlo. International Handbook of Cooperative Legislation. Pullman: State College Wash., 1954.

##### Journals

1. Capel, G. L. "The Role of Cooperatives in the Input Industries: Discussion," American Journal of Agricultural Economics, Vol. 52, No. 5 (Dec. 1970), pp. 693-94.
2. Dahl, W. A., and W. D. Dobson. "An Analysis of Alternate Financing Strategies and Equity Retirement Plans for Farm Supply Cooperatives," American Journal of Agricultural Economics, Vol. 58, No. 2 (May 1976), pp. 198-208.



3. Garoian, L., and G. Cramer. "Merger Component Growth of Agricultural Cooperatives," American Journal of Agricultural Economics, Vol. 50, No. 5 (Dec. 1968), pp. 1472-82.
4. Helmberger, P. "Future Roles for Agricultural Cooperatives," Journal of Farm Economics, Vol. 48, No. 5 (Dec. 1966), pp. 1427-34.
5. Knutson, R. D. "Cooperative Strategies in Imperfectly Competitive Market Structures," American Journal of Agricultural Economics, Vol. 56, No. 5 (Dec. 1974), pp. 904-12.
6. Maxwell, R. E., D. J. Ellison, and H. Jackson. "Farm Supply Cooperatives in Arkansas," Arkansas Farm Research, Vol. 21, No. 5, (Sept./Oct. 1972).
7. Swank, C. W. "The Role of Cooperatives in the Input Industries: Discussion," American Journal of Agricultural Economics, Vol. 52, No. 5 (Dec. 1970), p. 693.

U.S. Department  
of Agriculture

1. Abrahamsen, M. A. Adjusting Farm Supply Cooperatives to Members' Needs in the 1970's, FCS 47, U.S. Dept. Agr., Farmer Coop. Serv., Apr. 1965.
2. \_\_\_\_\_. Business Research of Regional Farm Supply Coops. GR-13. U.S. Dept. Agr., Farmer Coop. Serv., Feb. 1955.
3. \_\_\_\_\_. Purchasing Cooperatives: An Essential Tool for the Modern Farmer. FCS Info. 5. U.S. Dept. Agr., Farmer Coop. Serv., Sept. 1957.
4. \_\_\_\_\_. Recent Trends in Business Research Activities of Regional Farm Supply Cooperatives. GR-26. U.S. Dept. Agr., Farmer Coop. Serv., Feb. 1957.
5. \_\_\_\_\_. Operations of Major Regions' Purchasing Cooperatives, 1941-1951. Circ. C-148. U.S. Dept. Agr., Farm Credit Admin., Dec. 1952.
6. Bailey, J. M. Inventory Management by Selected Retail Farm Supply Coops, Area I. Michigan, Indiana, Ohio and Pennsylvania. GR-38. U.S. Dept. Agr., Farmer Coop. Serv., Jan. 1958.

7. \_\_\_\_\_ . Inventory Management by Selected Retail Farm Supply Coops Area II. R-37. U.S. Dept. Agr., Farmer Coop. Serv., July 1958.
8. \_\_\_\_\_ . Inventory Management by Selected Retail Farm Supply Coops, Area V. Tennessee, Alabama, Mississippi and Arkansas. R-39. U.S. Dept. Agr., Farmer Coop. Serv., Mar. 1959.
9. \_\_\_\_\_ . Inventory Management by Selected Retail Farm Supply Cooperatives, Area VI. New York, New Jersey, Virginia, West Virginia, North Carolina and Georgia. GR-70. U.S. Dept. Agr., Farmer Coop. Serv., Jan. 1960.
10. \_\_\_\_\_ . Credit Control in Selected Retail Farm Supply Cooperatives, Area VI. New York, New Jersey, Virginia, West Virginia, North Carolina and Georgia. GR-71. U.S. Dept. Agr., Farmer Coop. Serv., Feb. 1960.
11. \_\_\_\_\_ . Credit Control in Selected Retail Farm Supply Cooperatives, Area II. Washington, Oregon, Idaho and Utah. R-36. U.S. Dept. Agr., Farmer Coop. Serv., May 1958.
12. \_\_\_\_\_ . Two Supply Cooperatives Serving Low-Income Farmers: A Preliminary Analysis in Appalachia. GR-138. U.S. Dept. Agr., Farmer Coop. Serv., Nov. 1966.
13. \_\_\_\_\_ . Farm Supply Operations of Cooperative Gins and Elevators in Texas. GR-92. U.S. Dept. Agr., Farmer Coop. Serv., July 1961.
14. Eichers, T.R. Credit Control in Selected Retail Supply Cooperatives, Area III. Wisconsin, Minnesota, North Dakota, South Dakota and Northern Iowa. GR-43. U.S. Dept. Agr., Farmer Coop. Serv., June 1958.
15. \_\_\_\_\_ . Credit Control in Selected Retail Farm Supply Cooperatives, Area IV. Kansas, Nebraska, Missouri, Iowa, Illinois and Southern Wisconsin. GR-57. U.S. Dept. Agr., Farmer Coop. Serv., Apr. 1959.
16. \_\_\_\_\_ . Inventory Management by Selected Retail Farm Supply Cooperatives, Area III. Minnesota, Wisconsin, North Dakota, South Dakota and Northern Iowa. GR-50. U.S. Dept. Agr., Farmer Coop. Serv., Sept. 1958.

17. \_\_\_\_\_. Inventory Management by Selected Retail Farm Supply Cooperatives, Area IV. Kansas, Nebraska, Missouri, Iowa and Illinois. GR-66. U.S. Dept. Agr., Farmer Coop. Serv., Oct. 1959.
18. Foschia, John M. Midsize Farm Supply Cooperatives: Characteristics and Growth Strategy. RP-45. U.S. Dept. Agr., Econ. Stat. Coop. Serv., Farmer Coop. Serv., Mar. 1978.
19. Gessner, A. L., and K. B. Gardner. Trends in Growth of Farm Cooperatives 1959-1960. GR-110. U.S. Dept. Agr., Farmer Coop. Serv., Mar. 1963.
20. Griffin, N. Financial Structure of Regional Farm Supply Cooperatives. GR-124. U.S. Dept. Agr., Farmer Coop. Serv., 1965.
21. Kraenzle, C. A., and others. Where are Cooperatives in the Farm Supply Environment? FCS-44(7). U.S. Dept. Agr., Farmer Coop. Serv., Oct. 1977.
22. Mather, J. W. Handbook on Major Regional Cooperatives Handling Supplies, 1964 and 1965. GR-140. U.S. Dept. Agr., Farmer Coop. Serv., Mar. 1967.
23. \_\_\_\_\_. Handbook on Twenty Major Regional Cooperatives Handling Supplies 1968-70. RR-20. U.S. Dept. Agr., Farmer Coop. Serv., Sept. 1971.
24. \_\_\_\_\_. Major Regional Cooperative Supply Operations, Annual Volume Above \$25 Million, 1972-73. RR-29. U.S. Dept. Agr., Farmer Coop. Serv., Apr. 1975.
25. \_\_\_\_\_. Trends and Practices of Farm Supply Cooperatives. U.S. Dept. Agr., Farmer Coop. Serv., 1954.
26. U.S. Department of Agriculture, Farmer Cooperative Service. Supply Operations of Major Regional Cooperatives 1974-75. RR-40, July 1977.
27. \_\_\_\_\_, Economics, Statistics, and Cooperatives Service. Growth of Cooperatives in Seven Industries. RR-1, July 1978.
28. Wass, G. J. Financial Problems of Purchasing Cooperatives. MR-157. U.S. Dept. Agr., Farm Credit Admin., Feb. 1952.



29. Williams, R., and L. Biser. Analysis of Emerging Cooperatives (Financed by F.H.A.) 1965-1970. FCS-Info.-85. U.S. Dept. Agr., Farmer Coop. Serv., July 1972.

Experiment Stations

1. Blair, P. T. The Patron Credit Operations of Farmer Purchasing And Marketing Cooperatives. Miss. Agr. Exp. Sta., Agr. Econ., MR-49, Mar. 1966.
2. Garoian, L., and G. L. Cramer. Cooperative Mergers: Their Objectives, Successes and Impact on Growth. Oreg. Agr. Exp. Sta., Bull. 605, Feb. 1969.
3. Gries, G. E. Financial Structure of Local Missouri Farm Supply Cooperatives. Columbia Agr. Exp. Sta., Spec. Rep. 157, Aug. 1973.
4. Indiana Agricultural Experiment Station. Open Account Credit Policy of Farm Suppliers. Ind. Agr. Exp. Sta., Mimeo EC 138, Nov. 1956.
5. Jenkins, L. P. Operating Policies and Practices of Cooperative Purchasing Associations in Mississippi. Miss. Agr. Exp. Sta., Bull. 571, Mar. 1952.
6. Knudtson, A. C., and E. F. Koller. Accounts Receivable Credit in Minnesota Farm Supply Cooperatives. Minn. Agr. Exp. Sta., Bull. 430, May 1955.
7. Nandi, K. K., and D. N. Harrington. Credit Programs of Missouri Farm Cooperatives. Mo. Agr. Exp. Sta., Bull. 799, July 1965.
8. Roy, E. P. Economic Potential for a State Federated Cooperative Handling Farm Supplies. La. Agr. Exp. Sta., DAE Circ. 299, Oct. 1961.
9. \_\_\_\_\_. Farm and Agribusiness Cooperative Corporations in Louisiana, 1958. La. Agr. Exp. Sta. DAE Circ. 222, May 1958.
10. Rudel, R. K., and R. G. Walsh. Effect of Vertical Integration on Profitability of Ammonia and Solution Fertilizer Retailing by Cooperatives, Neb. Agr. Exp. Sta., SB 512, Feb. 1970.
11. Smith, E. D., and W. C. Brinkley. How Kentucky Farm Supply Purchasing Cooperatives are Controlled. Ky. Agr. Exp. Sta., Circ. 565, Nov. 1959.



12. Thomson, J. C., and G. H. Glover. A Planning Guide for a Local Farmer Purchasing Cooperative. Ga. Agr. Exp. Sta., Res. Bull. 16, Sept. 1967.
13. Valko, L. Farmer Cooperative Purchasing Associations in Washington. Wash. Agr. Exp. Sta., Circ. 370, July 1960.

Ph.D. Dissertations

1. Amann, Victor Francis. "An Analysis of the Role of Management in Minnesota Farm Supply Cooperatives." Ph.D. Dissertation. Univ. Minn., 1962.
2. Badr, Mahmoud Mahmoud. "Economics and Growth of Marketing and Purchasing Cooperative Firms in the United States." Ph.D. Dissertation. Okla. State Univ., 1968.
3. Barth, Glenn Richard. "Urban Consumer Attitudes Toward Farm Supply Cooperatives." Ph.D. Dissertation. Mont. State Univ., 1966.
4. Beierlein, J. G. "Optimizing the Capital Structure of a Farmer Cooperative Using a Member Oriented Analysis." Ph.D. Dissertation. Purdue Univ., 1977.
5. Cramer, Gail Latimer. "An Economic Analysis of the Merger Component in The Growth of Agricultural Cooperatives." Ph.D. Dissertation. Oreg. State Univ., 1968.
6. Dahl, W. A. "Alternative Financial Management Strategies for Local Farm Supply Cooperatives in Wisconsin." Ph.D. Dissertation. Univ. Wis., 1975.
7. Dickey, Ronald Wayne. "An Analysis of Financial Management of Agricultural Cooperative Business Organizations in Ohio and Recommendations for Improvement." Ph.D. Dissertation. Ohio State Univ., 1966.
8. Fischer, John. "The Economics of Cooperative Purchasing of Farm Supplies in Tennessee, With Emphasis on the Financial Aspects." Ph.D. Dissertation. Univ. Wis., 1955.
9. Koszarek, T. V. "Market Performance of Minnesota Retail Farm Supply Cooperatives." Ph.D. Dissertation. Univ. Minn., 1974.

10. Lough, H. W. "The Relationship Between Farm Supply Cooperatives' Economic Performance and Their Organizational Power Centers: Levels of Motivation to Achieve Objectives." Ph.D. Dissertation. Oreg. State Univ., 1971.
11. Nelson, J. L. "Taxation and Other Economic Effects on the Capital Structure of Farm Supply Cooperatives." Ph.D. Dissertation. N.C. State Univ., 1974.
12. Taylor, Norman Eugene. "The Midland Cooperative Wholesale, Inc., Its History and Analysis." Ph.D. Dissertation. Univ. Minn., 1956.

#### M.S. Theses

1. Bailey, John M. "The Capital Structure of Agricultural Cooperatives in Utah, 1953." M.S. Thesis. Utah State Univ., 1955.
2. Bagley, William B. "Wyoming Marketing, Supply and Bargaining Organizations Operated by Farmers and Ranchers for the Benefit of Members During 1961." M.S. Thesis. Univ. Wyo., 1964.
3. Bazyari, Habibollah Habib. "An Analysis of Operating Expenses in Selected Farm Supply and Marketing Cooperatives in Mississippi, 1955-1963." M.S. Thesis. Miss. State Univ., 1965.
4. Bieter, Robert Joseph. "An Economic Analysis of Cooperatives in Maryland." M.S. Thesis. Univ. of Md., 1957.
5. Buol, J. A. "Consolidation of Eastern Colorado Cooperatives." M.S. Thesis. Colo. State Univ., 1970.
6. Calloway, Tom L. "A Business Analysis of 55 Farmer's Purchasing Cooperatives, Tennessee, 1949." M.S. Thesis. Univ. Tenn., 1951.
7. Downey, W. David. "Purchasing Behavior of Farm Supply Cooperative Members." M.S. Thesis. Purdue Univ., 1963.
8. Duckett, Roland Edwin. "Communication Procedures, Educational Programs, Decision-Making Routines, and the Role of the Director in Independent Farm Supply Cooperatives in Virginia." M.S. Thesis. Va. Poly. Inst., 1969.

9. Erlewine, Keith R. "Market Structure and Firm Practices in Farm Supply Retailing: The Problem of Equitable Treatment of Large and Small Farmers." M.S. Thesis. Univ. Neb., 1962.
10. Ezzell, Walter L. "Accounting System for Retail Cooperative Associations." M. S. Thesis. Univ. Minn., 1950.,
11. Forrest, James Lacy. "An Analysis of Management Selection, Training and Evaluation Practices of Farmer Purchasing and Marketing Cooperatives in Mississippi and Suggestions for Development." M.S. Thesis. Miss. State Univ., 1963.
12. Geu, Henry. J. "Financial Ratios for Nebraska Grain and Farm Supply Cooperatives." M.S. Thesis. Univ. Neb., 1976.
13. Hogg, Howard Carl. "Merger of Selected Oregon Farm Cooperatives." M.S. Thesis. Oreg. State Univ., 1960.
14. Jenkins, Lewis Perron. "The Operating Policies and Practices of Cooperative Purchasing Associations Operating in Mississippi." M.S. Thesis. Miss. State Univ., 1950.
15. Maxwell, R. E. "Ratio Analysis and Decision Making in Farm Supply Cooperatives." M.S. Thesis. Univ. Ark., 1973.
16. Myers, Walter McIlroy. "Eastern Colorado Cooperative Study." M.S. Thesis. Colo. State Univ., 1969.
17. Novey, Donald F. "A Study of Selected Factors Related to Differential Participation of Members in a Sample of South Dakota Purchasing Cooperatives in 1958." M.S. Thesis. S. Dak. State Univ., 1959.
18. Pratt, Wilburn J. "The Cost-Output Relationship of a Kentucky Farm-Supply Cooperative." M.S. Thesis. Univ. Ky., 1962.
19. Reddell, John Alvin. "An Analysis of the Operations of Farmer Marketing and Purchasing Cooperatives in Mississippi, 1955-1962." M.S. Thesis. Miss. State Univ., 1965.
20. Rulon, D. K. "Pricing Policy Alternatives for Farm Supply Cooperatives." M.S. Thesis. Purdue Univ., 1972.



21. Scott, Dale W. "Economic Performance Analysis of Kansas Cooperative Farm Supply Sales Exemplified by TBA Items." M.S. Thesis. Kans. State Univ., 1966.
22. Simms, Raymond Lee. "Views Held by Commercial Farmers Respecting Needs, Wants, and Expectations of Supply Cooperatives in Augusta County, Virginia." M.S. Thesis. Va. Poly. Inst., 1969.
23. Strickland, Gary William. "An Analysis of Selected Operating Practices of Selected Cooperatives in Mississippi, 1965-1966." M.S. Thesis. Miss. State Univ., 1967.
24. Sturtevant, Robert. "A Linear Programming Analysis of Specific Organization and Diversification Alternatives of An Agricultural Supply Firm." M.S. Thesis. Univ. Mass., 1967.
25. Syambi, Abner Nelson. "Financial Ratios for Measuring Performance of Farm Supply Cooperatives." M.S. Thesis. Univ. W. Va., 1970.
26. Thompson, H. Harlow. "An Economic Analysis of the Operations of Farmers' Cooperative Purchasing Associations in Minnesota, 1949-1950." M.S. Thesis. Univ. Minn., 1952.
27. Trimis, Antonios E. "Factors Relating to Patronage of Purchasing Cooperatives by 107 Middle Tennessee Farmers." M.S. Thesis. Univ. Tenn., 1956.
28. Valpey, J. R. "Transferability of Equities of Oregon's Agricultural Marketing and Supply Cooperatives." M.S. Thesis. Oreg. State Univ., 1979.
29. Young, Gary F. "Factors Affecting the Sales of Supplies by South Carolina Farmer Supply Cooperatives." M.S. Thesis. Clemson Univ., 1969.

Ongoing Current  
Research Infor-  
mation System  
(CRIS) Projects

1. Groves, F. W. "Economic Analysis of the Cost of Product Settlement to Local Farm Supply Cooperatives," Univ. Wis., Madison, Wis. Period: 10-1-78 to 9-30-81. Objectives: Estimates the economic cost of providing credit to members of local farm supply cooperative; and simulates the effects of different product settlement policies on the financial position of cooperatives.



Completed Current  
Research Infor-  
mation System  
(CRIS) Projects

1. Coley, B. G. "Feasibility of Establishing Farmer's Cooperatives Among Low-income Farmers in 6 N.C. Counties," Agricultural and Technical Univ. N.C., Greensboro, N.C. Period: 10-1-78 to 9-30-79. Objectives: Examined markets of low-income farmers by farm inputs and ascertained if purchasing cooperatives were feasible and therefore helpful in increasing their incomes; examined markets in which these low-income farmers sell their major products and ascertained the feasibility of forming selling cooperatives to improve their income positions; and compared white and black low-income farmers to determine if there is any difference between the two groups in relation to objectives (1) and (2).
2. Dobson, W. D. "Financial Characteristics of Local Farm Supply Cooperatives in Wisconsin," Univ. Wis., Madison, Wis. Period: 7-1-78 to 6-30-79. Objectives: Compared the liquidity, solvency, efficiency, and net savings ratios of Wisconsin farm supply cooperatives to comparable industry standard financial ratios; explained the differences between the ratios for the Wisconsin farm supply cooperatives and the industry standard ratios; and developed prescriptions for increasing operating efficiency and growth rates of farm supply cooperatives from the information obtained in connection with objectives (1) and (2).
3. Gordon, J. A. "Farmers' Evaluation of Management Practices of Farmer Supply Cooperatives," Univ. Ark., Pine Bluff, Ark. Period: 1-25-74 to 1-24-79. Objectives: Evaluated opinions of farmers towards pricing practices and merchandizing techniques currently used by firms handling products used in agricultural production; identified factors that influence farmers towards cooperatives; and determined if the difference in farmers' opinions about price discounts and other terms of trade could be explained by some selected socioeconomic factors.
4. \_\_\_\_\_. "Earnings of Farmers Through Cooperative Action in Arkansas," Univ. Ark., Pine Bluff, Ark. Period: 6-16-72 to 6-15-77. Objectives: Determined if prices received through cooperatives are higher than those received by individual action; determined if cooperatives give farmers a cost advantage in purchasing supplies over retail cost by individuals; and determined the role of cooperatives in bargaining.

5. Jackson, H. "Accounting Systems and Ratio Analysis for Decision Making for Cooperatives," Univ. Ark., Fayetteville, Ark. Period: 5-1-72 to 9-30-79. Objectives: Developed an accounting system for cooperatives to improve the decision-making process and promoted effectiveness of farm supply cooperatives in serving rural people.
6. Manvel, M. L. "Economic Aspects of Firm Management of Farmer Cooperatives," Kans. State Univ., Manhattan, Kans. Period: 3-12-65 to 6-30-74. Objectives: Determined the kinds of records kept by grain and farm supply cooperatives and appraised their usefulness as sources of information for performing such management functions as planning and control; identified, measured and evaluated relationships between variables in the firms' financial statements to determine those variables which affect economic success; determined key standards and financial guides characteristic of successful firms; developed and adapted special forms and techniques whereby income and costs of producing that income are matched so that the net effect of each significant economic activity in grain and farm supply cooperatives can be determined for purposes of control and planning.
7. Sorenson, L. O. "Impact of Changing Transportation System on Local Grains and Farm Supply Cooperatives," Kans. State Univ., Manhattan, Kans. Period: 7-1-71 to 12-31-77. Objectives: Estimated quantities of grain that will move through country elevators and commercial channels in 1975 and 1980 by counties; estimated demand for feed and fertilizer; projected alternate changes in grain transportation; determined economic feasibility of alternative systems of grain movement from producers to destinations; determined effect of changes on number, size, type, and location of country elevators and on local employment and services; and determined consequences of projected transportation changes on distribution of feed and fertilizer, while developing guidelines which individual firms could use in investment and transportation decisions.
8. Wilkins, P. C. "Producer Characteristics in Membership and Use of Farmer Cooperatives," Farmer Cooperative Service, U. S. Dept. Agri., Washington, D.C. Period: 9-1-78 to 6-30-79. Objectives: Determined producer membership by type of cooperative, portion of major crops marketed through cooperatives, portion of farm supplies purchased from cooperatives, and related

information by age of producer, member-nonmember status, and type, and size of farm.

## FEED

### Books

1. Harris, L. E., and others. An International Feed Nomenclature and Methods for Summarizing and Using Feed Data to Calculate Diets. Logan, Utah: Utah State Univ. Press, 1968.
2. Pfof, H. B. (Ed.). Feed Manufacturing Technology. Manhattan, Kans.: Ag Press, 1976.
3. Phillips, Richard. Managing for Greater Returns in Grain, Feed, and Other Retail Businesses Serving Agriculture. 2nd Ed. Manhattan, Kans.: Ag. Res.

### Journals

1. Brensike, V. J. "The Changing Structure of Markets for Commercial Feeds," Journal of Farm Economics, Vol. 40, No. 5 (Dec. 1958), pp. 1201-13.
2. Fischer, W. D., and L. W. Schruben. "Linear Programming Applied to Feed Mixing Under Different Price Conditions," Journal of Farm Economics, Vol. 33, No. 2 (May 1951), pp. 183-91.
3. Hutton, R. F., and R. H. McAlexander. "A Simplified Feed-Mix Model," Journal of Farm Economics, Vol. 39, No. 3 (Aug. 1957), pp. 714-30.
4. \_\_\_\_\_, and J. R. Allison. "A Linear Programming Model for Development of Feed Formulas Under Mill-Operating Conditions," Journal of Farm Economics, Vol. 39, No. 1 (Feb. 1957), pp. 94-111.
5. Katsman, I. "Solving Feed Problems Through Linear Programming," Journal of Farm Economics, Vol. 38, No. 2 (May 1956), pp. 420-29.
6. Mann, T., and A. Paulsen. "Economic Impact of Restricting Feed Additives in Livestock and Poultry Production," American Journal of Agricultural Economics, Vol. 58, No. 1 (Feb. 1976), pp. 47-53.
7. McDonough, J. A. "Feed Formulation for Least Cost of Grain," American Journal of Agricultural Economics, Vol. 53, No. 1 (Feb. 1971), pp. 106-08.



8. McMillian, W. "A Demand Curve for Commercial Dairy Feed in Northeastern Pennsylvania," Journal of Farm Economics, Vol. 35, No. 4 (Nov. 1953), pp. 606-10.
9. Meilke, K. D. "Demand for Feed Ingredients by U.S. Formula Feed Manufacturers," Agricultural Economics Research, Vol. 26., No. 3 (July 1974), pp. 78-89.
10. \_\_\_\_\_. "An Aggregate U.S. Feed Grain Model," Agricultural Economics Research, Vol. 27, No. 1 (Jan. 1975), pp. 9-18.
11. Mohr, G. M. "The Bulk Constraint and Computer Formulations of Least Cost Feedmixes," Review of Marketing and Agricultural Economics, Vol. 40, No. 1 (Mar. 1972), pp. 15-28.
12. Simpson, S., and L. G. Tweeten. "Instability in U.S. Feed Grains Supply and Utilization," Southern Journal of Agricultural Economics, Vol. 10, No. 2 (Dec. 1978), pp. 133-137.
13. Trimble, R. L., and J. A. Hopkin. "Use and Management of Sales Financing by Hog-Feed Dealers in Central Illinois," Illinois Agricultural Economics, Vol. 10, No. 2; Vol. 11, No. 1, (July 1970, Jan. 1971), pp. 15-22.

U.S. Department  
of Agriculture

1. Ahalt, J. D., and A. C. Egbert. The Demand for Feed Concentrates: A Statistical Analysis. ERS-236. U.S. Dept. Agr., Econ. Res. Serv., May 1965.
2. Allen, G. C., and M. Devers. National and State Livestock-Feed Relationships. SB-446. U.S. Dept. Agr., Econ. Res. Serv., Feb. 1970.
3. Askew, W. R., C. J. Vosloh, and V. J. Brensike. Case Study of Labor Costs and Efficiencies in Warehousing Formula Feeds. RR-205. U.S. Dept. Agr., Agr. Mktg. Serv., Nov. 1957.
4. \_\_\_\_\_, and V. J. Brensike. The Mixed Feed Industry. RR-38. U.S. Dept. Agr., Agr. Mktg. Res., May 1953.
5. Brensike, V. J. Formula-Feed Warehousing Costs: A Study in Improving Efficiency in Marketing of Farm Feeds. RR-268. U.S. Dept. Agr., Agr. Mktg. Serv., Sept. 1958.



6. Brensike, V. J. Use of Antibiotics, Other Drugs and Vitamin B12 at Low Levels in Formula Feeds. AMS-120. U.S. Dept. Agr., Agr. Mktg. Serv., May 1950.
7. \_\_\_\_\_. Inventory Policies of Feed Mills. AMS-70. U.S. Dept. Agr., Agr. Mktg. Serv., Sept. 1955.
8. \_\_\_\_\_. and C. J. Vosloh. Price Spreads for Formulated Poultry Feeds in Illinois. RR-377. U.S. Dept. Agr., Agr. Mktg. Serv., Jan. 1960.
9. \_\_\_\_\_. and W. R. Askew. The Changing Pattern of Capital Expenditures in the Feed-Milling Industry. AMS-54. U.S. Dept. Agr., Agr. Mktg. Serv., June 1955.
10. \_\_\_\_\_. Costs of Operating Selected Feed Mills as Influenced by Volume, Services, and Other Factors. RR-79. U.S. Dept. Agr., Agr. Mktg. Serv., Feb. 1955.
11. Brensike, V. J. Comparisons of Operating Costs in Feed Mills. U.S. Dept. Agr., Agr. Mktg. Serv., 1955.
12. Camp, T. H. Costs and Practices of Selected Cooperatives in Operating Bulk-Feed Trucks. GR-132. U.S. Dept. Agr., Farmer Coop. Serv., Oct. 1965.
13. Deloach, D. B., and J. A. Maetzold. Collective Bargaining for Poultry Feed Prices, California. GR-141. U.S. Dept. Agr., Farmer Coop. Serv., Mar. 1967.
14. Doty, H. O. Cooked Soybeans for Feed. ERS-278. U.S. Dept. Agr., Econ. Res. Serv., Aug. 1965.
15. Eichers, T. R., and A. J. Hargas. Mobile Feed Milling by Cooperatives in the Northeast United States. GR-99. U.S. Dept. Agr., Farmer Coop. Serv., Dec. 1961.
16. Gessner, Anne L. Integrated Feed Operations Through Farm Cooperatives. R-100. U.S. Dept. Agr., Farmer Coop. Serv., Apr. 1962.
17. Hodges, E. F., G. C. Allen, and G. A. Davis. Formula Feed Industry in 1969: A Preliminary Report. ERS-494. U.S. Dept. Agr., Econ. Res. Serv., Nov. 1971.
18. \_\_\_\_\_. Formula Feed Industry, 1969, Statistical Summary SB-485. U.S. Dept. Agr., Econ. Res. Serv., May 1972.

19. Lee, R. E., and J. C. Snyder. A Location-Logistics System for Feed Farm Management. MMR-867. U.S. Dept. Agr., Econ. Res. Serv. 1970.
20. Mather, J. W., and J. M. Bailey. Specialization in Cooperative Feed Manufacturing. RR-27. U.S. Dept. Agr., Farmer Coop. Serv., Jan. 1974.
21. Mutti, R. J., and L. J. McGinnis. Operations of Local Feed and Supply Bargaining Cooperatives in Illinois. GR-136. U.S. Dept. Agr., Farmer Coop. Serv., July 1966.
22. Nelson, P. E. Price Differentials for Complete Feeds, Supplements and Shelled Corn, Regression Analysis. AER-198. U.S. Dept. Agr., Econ. Res. Serv., Feb. 1971.
23. Phillips, R. Costs of Procuring, Manufacturing and Distributing Mixed Feeds in the Midwest: Case Study of Four Types of Organizations. Marketing Research Report No. 388. U.S. Dept. Agr., Agr. Mktg. Ser., Apr. 1960.
24. Poats, F. J., and R. W. Parker. Marketing Molasses for Livestock Feed. Marketing Research Report No. 133. U.S. Dept. Agr., Agr. Mktg. Res., July 1956.
25. Rickey, L. F. Delivering Feed in Bulk. Circ. C-143. U.S. Dept. Agr., Farm Credit Admin., Jan. 1952.
26. \_\_\_\_\_. Operating Costs of Selected Cooperative Feed Mills and Distributors. B-56. U.S. Dept. Agr., Farm Credit Admin., Nov. 1949.
27. Robbins, C. B., and L. F. Rickey. Controlling Open Account Credit in Feed Cooperatives. Circ. C-24. U.S. Dept. Agr., Farmer Coop. Serv., Sept. 1957.
28. Smith, E. J. Custom Feed Grinding and Mixing in Northwestern Illinois. ERS-12. U.S. Dept. Agr., Econ. Res. Serv., Aug. 1961.
29. Stafford, J. H., L. E. Ott, and J. C. Snyder. Managerial Aspects of Least Cost Feed Formulation With Linear Programming. Marketing Research Report No. 729. U.S. Dept. Agr., Agr. Mktg. Serv., Aug. 1965.
30. Thuroczy, N. M., and R. Phillips. Feed Manufacturers' and Dealers' Gains and Losses From Contract Programs in the Midwest. ERS-107. U.S. Dept. Agr., Econ. Res. Serv., Feb. 1963.

31. U.S. Department of Agriculture, Agricultural Marketing Service. Cost Standards for a Model Stationary Custom Feed Mill for the Midwest. AMS-215. 1958.
32. \_\_\_\_\_, Economic Research Service. Feed Statistics 1971. SB-410. July 1972.
33. \_\_\_\_\_, Economics, Statistics, and Cooperatives Service. Moroni Feed Company: Impact of a Cooperative on Sanpete County, Utah. R-13. Oct. 1979.
34. Vosloh, C. J. Labor and Capital for Mixing Formula Feeds. Marketing Research Report No. 564. U.S. Dept. Agr., Agr. Mktg. Serv., Oct. 1962.
35. \_\_\_\_\_. Operating Costs in Packing Mixed Feeds with Emphasis on Labor and Capital. Marketing Research Report No. 658. U.S. Dept. Agr., Agr. Mktg. Serv., May 1964.
36. \_\_\_\_\_. Processing Feed Ingredients: Costs, Labor, and Capital Requirements. Marketing Research Report No. 731. U.S. Dept. Econ. Res. Serv., Nov. 1965.
37. \_\_\_\_\_, W. R. Askew, and V. J. Brensike. Custom Feed-Milling in the Midwest: Model Plant Operations, Costs and Charges. Marketing Research Report No. 273. U.S. Dept. Agr., Agr. Mktg. Serv., Sept. 1958.
38. \_\_\_\_\_, and V. J. Brensike. The Changing Feed Mixing Industry: Practices in Selected States. Marketing Research Report No. 506. U.S. Dept. Agr., Econ. Res. Serv., Oct. 1961.
39. Vosloh, C. J. Costs and Economies of Scale in Feed Manufacturing. Marketing Research Report No. 815. U.S. Dept. Agr., Econ. Res. Serv., Mar. 1968.
40. \_\_\_\_\_. Ingredient Handling by Feed Manufacturers: Capital and Labor Requirements. Marketing Research Report No. 727. U.S. Dept. Agr., Econ. Res. Serv., July 1965.
41. \_\_\_\_\_. Feed Manufacturing Costs and Capital Requirements. AER-335. U.S. Dept. Agr., Econ. Res. Serv., May 1976.
42. \_\_\_\_\_. Structure of the Feed Manufacturing Industry, 1975: A Statistical Summary. SB-596. U.S. Dept. Agr., Econ. Stat. Coop. Serv., Feb. 1978.



Experiment Stations

1. Andreus, R. A. Variations in Mixed Feed Prices and the Potential for Grain Purchasing Contracts. N.H. Agr. Exp. Sta., Agr. Econ. Res., Mimeo 34, Dec. 1963.
2. Bakken, H. H., and F. C. Temple. Wholesale Feed Distribution in Wisconsin. Wis. Agr. Exp. Sta., Res. Bull. 208, June 1964.
3. Bath, D. L., and others. Evaluation of Computer-Formulated Least-Cost Concentrate Mixes for Dairy Cows. Calif. Agr. Exp. Sta., Vol. 23, No. 1, Jan. 1969.
4. Bursch, W. G. Pricing Structure and Service Costs in the Retail Feed Market in Illinois. Ill. Agr. Exp. Sta., AERR 100, Sept. 1970.
5. Courtney, R. H. Mixed Feed Manufacturing in the Central Valley, California. Univ. Calif., Giannini Foundation Inf. Series, No. 68-7, Feb. 1969.
6. Cunningham, W. C. An Analysis of Mobile Feed Milling Operations in Texas. Tex. Agr. Exp. Sta., MP-689, Nov. 1963.
7. Dahl, D. C., and R. D. Peterson. A Primer on the Production and Distribution of Feed, Fertilizer, and Farm Machinery. Colo. State Univ., Agr. Exp. Sta., Rep., Nov. 1972.
8. Dauzat, R. J., and E. P. Roy. The Economic Feasibility of On-Farm Feed Processing for Selected Livestock Enterprises in Louisiana. La. Agr. Exp. Sta., DAE Res. Rep. 495, Nov. 1975.
9. Degn, A., C. Phillips, and C. R. Harston. On-Farm Feed Processing in Montana. Mont. Agr. Exp. Sta., Bull. 594, Apr. 1965.
10. Dennis, C. C. Time Requirements in Feed Mill Operations. Mich. Agr. Exp. Sta., Q.B. Vol. 43, No. 1, Aug. 1960, pp. 67-69.
11. Dietrich, R. A. Interregional Competition in the Cattle Feeding Economy. Tex. Agr. Exp. Sta., PR 3243, Feb. 1974.
12. \_\_\_\_\_, J. R. Martin, and P. W. Ljungdahl. The Capital Structure and Financial Management Practices of the Texas Cattle Feeding Industry. Tex. Agr. Exp. Sta., Bull. 1128, Dec. 1972.



13. \_\_\_\_\_. Custom Feeding Clients Using Texas Feedlots--  
Operational Characteristics, Management Practices, and  
Feeding Strategies. Tex. Agr. Exp. Sta., B1148, Oct.  
1974.
14. French, C. E. Labor Efficiency in Grinding and Mixing  
Feeds in Indiana Grain Elevators. Ind. Agr. Exp. Sta.,  
Bull. 639, Nov. 1956.
15. Gleaves, E. W. Nebraska Computer Feed Formulation Data,  
Feed Ingredients Analysis, and Ration Specifications  
and Restrictions. Neb. Agr. Exp. Sta., MP 24, Feb.  
1973.
16. Gray, J. R. Marketing Practices of Feed Processors in  
New Mexico, 1960. N. Mex. Agr. Exp. Sta., Bull. 476,  
June 1963.
17. Greer, R. C., and D. C. Dahl. Livestock Feed Concentrate  
Consumption by County. Minn. Agr. Exp. Sta., Tech.  
Bull. 270, Nov. 1969.
18. Hassler, J. B. The U.S. Feed Concentrate-Livestock  
Economy's Demand Structure, 1949-1959. Neb. Agr. Exp.  
Sta., Res. Bull. 203, Oct. 1962.
19. Herder, R. J. Farmers' Preference for Formula Feeds.  
Kans. Agr. Exp. Sta., Econ. Rep. 90, Aug. 1960.
20. Hill, L. D., and C. C. Dennis. The Feed Manufacturing  
Industry and Michigan Agriculture. Mich. Agr. Exp.  
Sta., Spec. Bull. 444, Feb. 1963.
21. Hoglund, C. R. Economies of Feed Production in  
South-Central Michigan. Mich. Agr. Exp. Sta., Spec.  
Bull. 265, Sept. 1958.
22. Hopkins, R. D., and others. An Analysis of Optimum  
Number, Size and Location of Feed Mixing Plants in New  
England. N. H. Agr. Exp. Sta., Res. Rep. 22, Aug  
1971.
23. Kohls, R. L. Farmers' Behavior and Decisions in  
Purchasing Feed, Machinery, and Fertilizer. Purdue  
Agr. Exp. Sta., Res. Bull. 749, Oct. 1962.
24. McDowell, J., and W. F. Williams. Feed Use in Oklahoma  
Commercial Feedlots. Okla. Agr. Exp. Sta., Processed  
Series P-433, Dec. 1962.

25. McGlothlin, R. S. Hay and Feed Grains in the West: Supplies, Movement and Utilization. Ariz. Agr. Exp. Sta., Bull. 289. Nov. 1957.
26. Moore, C. A. Feed Milling and Mixing in North Central Texas. Tex. Agr. Exp. Sta., MP-679, Sept. 1963.
27. Peterson, R. D., and D. C. Dahl. Markets for Purchased Farm Inputs in the Western Region: Feed, Fertilizer, Farm Machinery. Colo. State Univ., Agr. Exp. Sta., Bull 560S, Sept. 1974.
28. Phillips, R. Analysis of Costs and Benefits to Feed Manufacture From Financing and Contract Programs in the Midwest. Iowa Agr. & Home Econ. Exp. Sta., Spec. Rep. 30, Oct. 1962.
29. Phillips, T. D., R. G. Brooks, and T. B. Pugh. Mississippi Grain and Feed Ingredient Movement Patterns, 1959-1960. Miss. Agr. Exp. Sta., M.R. 38, June 1963.
30. Reed, F. D. Formula Feed Manufacture and Distribution in Maine. Maine Agr. Exp. Sta., Misc. Publ. 668, Apr. 1965.
31. Rogers, G. B., and H. C. Woodworth. Distributing and Handling Grain Feeds in New Hampshire. Improving the Efficiency of the Grain Feeding Operation on Poultry and Dairy Farms. N. H. Exp. Sta., Bull. 431, Aug. 1956.
32. \_\_\_\_\_. Distributing and Handling Grain-Feeds in New Hampshire, Problems in Retail Distribution. N. H. Agr. Exp. Sta., Bull. 424, Apr. 1956.
33. Roy, E. P., and P. L. Wiggins. Resource Requirements for Feed Milling Facilities in Louisiana. La. Agr. Exp. Sta., DAE Res. Rep. 415, Oct. 1970.
34. St. Clair, J. S., and M. L. Schlagel. Marketing Commercial Feeds in Selected Great Plains and Mountain States. Wyo. Agr. Exp. Sta., Res. Jour. 102, Dec. 1975.
35. \_\_\_\_\_. Marketing Commercial Feed in Wyoming. Wyo. Agr. Exp. Sta., Bull. 581, Feb. 1973.
36. Smith, E. P. Federal Regulatory Control of Medicated Animal Feeds. Mont. Agr. Exp. Sta., Res. Rep. 16, Feb. 1972, pp. 1-6.

37. Stafford, J. H., and J. C. Snyder. Simulator Programs for Feed Manufacturing Inventory Control. Ind. Agr. Exp. Sta., Res. Progress Rep. 208, Dec. 1965.
38. Stahl, W. H., and W. S. Farris. Grain Banking in the Midwest: Its Impact on the Feed Industry and the Farmer. Ind. Agr. Exp. Sta., Res. Bull. 727, Aug. 1964.
39. \_\_\_\_\_, and P. L. Farris. Use of Contracts in Selling Livestock Feed by Indiana Country Elevators. Ind. Agr. Exp. Sta., Res. Progress Rep. 1, June 1962.
40. Thompson, W. H. Transportation of Poultry Feed Ingredients From the North Central States. S. Dak. Agr. Exp. Sta., Bull. 485, May 1960.
41. Tinley, J. M., and H. E. Erdman. Operating Problems of a Cooperative Poultry and Feed Association. Calif. Agr. Exp. Sta., Bull 759, Dec. 1957.
42. Trotter, C. E., and R. C. Hoch. The Economic Feasibility of On-The-Farm Milling. Pa. State Univ., Agr. Exp. Sta., Bull. 745, Dec. 1967.
43. \_\_\_\_\_, and L. Chubbuck. Customer Credit in the Pennsylvania Feed Industry: Practices, Costs, and Benefits. Pa. State Univ., Agr. Exp. Sta., Bull 786, Feb. 1973.
44. Warrack, A. A., and L. B. Fletcher. Location and Efficiency of the Iowa Feed-Manufacturing Industry. Iowa Agr. & Home Econ. Exp. Sta., Bull. 571, Mar. 1970.
45. Weightman, P. H. Concentrated Feedstuffs for Livestock in Belgium-Luxembourg, 1960-1961 to 1965-1966. N.Y. Agr. Exp. Sta., AE Res. 286, May 1969.
46. \_\_\_\_\_. Concentrated Feedingstuffs for Livestock in the United Kingdom; 1960-61 to 1965-66. Cornell Agr. Exp. Sta., AE Res. 225, June 1967.
47. \_\_\_\_\_. Concentrated Feedingstuffs for Livestock in the Netherlands; 1960-61 to 1965-66. Cornell Agr. Exp. Sta., AE Res. 239, Jan. 1968.
48. White, H. D., W. M. Bruce, and W. M. Hurst. Small Pre-Mix Feed Mills for the Poultry Industry. Ga. Agr. Exp. Sta., Bull. (n.s.) 3, Nov. 1954.



49. Wyckogg, J. B., and O. L. Brough. Pelleted Alfalfa Can Help Stockmen and Hog Growers. Wash. Agr. Exp. Sta., C. 345, Dec. 1958.

Ph.D. Dissertations

1. Armstrong, Jack Hamilton. "Increasing the Operating Efficiency of Local Feed Mills." Ph.D. Dissertation. Purdue Univ., 1962.
2. Bright, Cryil Adeniyi. "Characteristics of the Retail Feed Business in Wisconsin - 1954." Ph.D. Dissertation. Univ. Wis., 1956.
3. Bursch, William G. "An Analysis of Selected Aspects of Differential Pricing in Illinois Retail Feed Markets." Ph.D. Dissertation. Univ. Ill., 1970.
4. Courtney, Richard Howard. "Efficient Organization in California's Central Valley Feed Manufacturing Industry." Ph.D. Dissertation. Univ. Calif., 1968.
5. Eubanks, Kenneth Wayne. "An Economic-Engineering Study of the Feed Manufacturing Industry in Montana." Ph.D. Dissertation. Mont. State Univ., 1962.
6. Funk, T. F. "Market Analysis of Branded Commercial Feeds." Ph.D. Dissertation. Purdue Univ., 1971.
7. Greer, R. Clyde. "An Analysis of Price Dispersion." Ph.D. Dissertation. Univ. Minn., 1970.
8. Guthrie, T. L. "Initial Forward Planning Strategy and Successive Review by the Commercial Feed Firm Utilizing a Static Compacted Linear Programming Model." Ph.D. Dissertation. Purdue Univ., 1970.
9. Joo, Y. J. "An Economic Analysis of the System for Marketing Soybeans and Selected Feed Grains Originating in or Utilized in Louisiana." Ph.D. Dissertation. La. State Univ., 1977.
10. Kalb, Klaus. "Product Differentiation in the Mixed Feed Industry." Ph.D. Dissertation. Ohio State Univ., 1964.
11. Learn, Elmer Warner. "Farm Level Demand Relationships for Livestock Products and Feed Concentrates." Ph.D. Dissertation. Pa. State Univ., 1957.



12. Lee, Robert Ellsworth. "A Location-Distribution System for Feed Firm Management." Ph.D. Dissertation. Purdue Univ., 1968.
13. Mann, T. L. "Economic Impact of Restricting Feed Additives in Livestock and Poultry Production." Ph.D. Dissertation. Iowa State Univ., 1973.
14. Marten, J. F. "An Economic Analysis of the Future of the Liquid Feed Supplement Industry in Indiana." Ph.D. Dissertation. Purdue Univ., 1973.
15. Mauldon, Roger Gregory. "An Econometric Analysis of the Supply of Livestock Products and Demand for Feed Grains." Ph.D. Dissertation. Iowa State Univ., 1962.
16. Meilke, K. D. "The Demand for Animal Feed: An Economic Analysis." Ph.D. Dissertation. Univ. Minn., 1973.
17. Ngwashi, A. "Optimum Sources of Feedgrains for the Massachusetts Dairy Industry." Ph.D. Dissertation. Univ. Minn. 1976.
18. Overton, C. E. "A Model for Long Run Feed Ingredient Procurement Planning Under Risk." Ph.D. Dissertation. Purdue Univ., 1977.
19. Stafford, Joseph Hoover. "A Production Planning and Inventory Control System for Feed Manufacturers." Ph.D. Dissertation. Purdue Univ., 1965.
20. Stammer, R. W. "A Mathematical Programming Model for Determining the Optimal Spatial Organization of a Multi-plant Industry: With an Emperical Application to the New England Livestock Feed Processing Industry." Ph.D. Dissertation. Univ. Conn., 1971.
21. Temple, Frederick. "Grain Marketing Practices Among Wholesale Feed Manufacturers, Wisconsin, 1956." Ph.D. Dissertation. Univ. Wis., 1958.
22. Turner, Michael Stanley. "An Economic Analysis of the Structure of the Grain, Feed and Farn Supply Industry of Ohio." Ph.D. Dissertation. Ohio State Univ., 1965.
23. Wilkinson, J. K. "Analysis of Retail Dairy Feed Markets and Buyer-Seller Procurement Practices in Selected Kentucky Counties." Ph.D. Dissertation. Univ. Ky., 1973.

24. Zurenko, John George. "Alfalfa Dehydration: Operations and Costs." Ph.D. Dissertation. Mont. State Univ., 1969.

M.S. Theses

1. Aaron, T. D. "The Economics of Acquiring the Feed Grains used in Georgia." M.S. Thesis. Univ. Ga., 1956.
2. Amos, John Max. "Credit by Retail Feed Dealers." M.S. Thesis. Kans. State Univ., 1957.
3. Austin, Philip E. "An Economic Analysis of the North Dakota Feed Manufacturing Industry." M.S. Thesis. N. Dak. State Univ., 1966.
4. Baker, Maurice E. "The Evaluation of Labor Use in Indiana Grain Elevators and Feed Mills." M.S. Thesis. Purdue Univ., 1959.
5. Becker, Kenneth Lee. "An Appraisal of the Market and the Marketing System for Commercial Feed in Douglas County." M.S. Thesis. Univ. Ill., 1963.
6. Brinkerhoff, Kendell W. "Concentrate Feed Handling Methods and Costs by Dairy and Beef Producers - Selected Utah Counties, 1961-62." M.S. Thesis. Utah State Univ., 1964.
7. Cavanaugh, J. D. "An Analysis of the Feed Grain Market for Alabama in 1970." M.S. Thesis. Auburn Univ., 1971.
8. Coulter, J. M. "Projections of Feed Requirements and Feed Balances for the Wyoming Livestock Economy." M.S. Thesis. Univ. Wyo., Dec. 1976.
9. Davis, William Lovard, Jr. "An Economic Analysis of the Procurement of Feed Grains by Northwest Arkansas Feed Manufacturers." M.S. Thesis. Univ. Ark., 1960.
10. DeCook, Stephen K. "Estimates of Locational Shifts in the Retail Feed Industry in Two Functional Economic Areas in Iowa." M.S. Thesis. Iowa State Univ., 1967.
11. Degn, Arne. "Economic Opportunities for on the Farm Feed Processing in Montana." M.S. Thesis. Mont. State Univ., 1964.
12. Dirks, Harlan J. "Economic and Organizational Aspects of Cooperative Feedyards." M.S. Thesis. S. Dak. State Univ., 1960.

13. Eubanks, Kenneth W. "An Economic-Engineering Study of the Feed Manufacturing of Montana." M.S. Thesis. Mont. State Univ., 1962.
14. Falconer, James Max. "The Effectiveness of Selected Practices of Feed Distribution in Illinois." M.S. Thesis. Univ. Ill., 1955.
15. Gilbreath, Zay William. "Procedures for Applying Break-Even Analysis and Replacement Theory to Feed Delivery Operations." M.S. Thesis. Kans. State Univ., 1964.
16. Glasco, Gerald Dean. "An Economic Analysis of Feed Processing in Hog Production." M.S. Thesis. Univ. Ill., 1958.
17. Gruel, John Samuel. "A Managerial Analysis of a New York State Feed Manufacturing Firm, 1963." M.S. Thesis. Cornell Univ., 1966.
18. Hammer, Maurice Harvey. "Estimating the Market Potential for Commercial Feeds in the Eastern Third of Kansas." M.S. Thesis. Kans. State Univ., 1965.
19. Harris, J. M. "An Analysis of Feed and Other Grain Movements Between Certain Southern and Corn Belt States." M.S. Thesis. Auburn Univ., 1975.
20. Herder, Richard John. "An Economic Analysis of Retail Feed Credit in Minnesota." M.S. Thesis. Univ. Minn., 1959.
21. Herzinger, Kim C. "An Evaluation of Supply Credit Extended by Feed and Fertilizer Retailers in Effingham and Woodford Counties, Illinois." M.S. Thesis. Univ. Ill., 1977.
22. Hopkins, R. D. "Economic Analysis of the Number, Size, and Location of Feed Mixing Plants in the New England Commercial Feed Industry." M.S. Thesis. Univ. N.H., 1971.
23. Justice, William Larry. "An Economic Analysis of Delivery of Manufactured Feed by Truck." M.S. Thesis. Kans. State Univ., 1965.
24. Kaff, Wayne Lee. "A Procedure for Determination of Millfeed Demand." M.S. Thesis. Kans. State Univ., 1965.

25. Kearney, J. "An Analysis of a Feed Manufacturing Plant's Operations." M.S. Thesis. Purdue Univ., 1968.
26. Kesecker, James Melvin. "Salient Characterisitics of Feed Marketing in West Virginia." M.S. Thesis. Univ. W. Va., 1954.
27. Krueckenberg, Harry F. "An Analysis of Farmer's Feed Purchasing Activities." M.S. Thesis. Purdue Univ., 1960.
28. Lee, Robert Ellsworth. "The Impact of New Marketing Developments on Regional Feed Manufacturers." M.S. Thesis. Purdue Univ., 1965.
29. Linduff, J. R. "Cost-Based Decision Aids for Custom Feed Millers." M.S. Thesis. Okla. State Univ., 1978.
30. Lytle, John S. "Bulk Feed and Grain Bank Operations Demanded by Ohio Farmers." M.S. Thesis. Ohio State Univ., 1963.
31. McClure, Robert Harold. "An Analysis of the Impact of Vertical Integration on the Hog Industry." M.S. Thesis. Texas A & M Univ., 1959.
32. McClure, S. "A Planning Model for Country Elevator Feed Enterprises." M.S. Thesis. Univ. Mo., 1976.
33. McElroy, Robert Cecil. "Most Profitable Feed Formulation Through Linear Programming." M.S. Thesis. Pa. State Univ., 1961.
34. McGinnis, Laverne James. "An Analysis of Selected Purchasing Alternatives Available to Swine Producers Who Prepare Complete Rations." M.S. Thesis. Univ. Ill., 1965.
35. Menkhaus, D. J. "Developing and Testing a Linear Programming Model of a Grain Elevator and Feed Firm." M.S. Thesis. Mich. State Univ., 1970.
36. Miller, T. "Application of the Linear Programming Method of Least Cost Feed Formulation to New Jersey Poultry Feed Manufacturers." M.S. Thesis. Rutgers-N.J. State Univ., 1968.
37. Moeller, A. R. "Custom Mix Feed Milling in Nebraska; Economies of Size and Plant Utilization." M.S. Thesis. Univ. Neb., 1971.



38. Mueller, P. R. "Economies of Size in Feed Retailing Operations." M.S. Thesis. Iowa State Univ., 1972.
39. Noh, K. M. "Regional Estimation of Planted Acreage for Feed Grain in the U.S." M.S. Thesis. Univ. Ga., 1975.
40. Otto, L. A. "A Cross Sectional Analysis of Factors the Prices of Prepared Feeds in Wyoming." M.S. Thesis. Univ. Wyo., 1974.
41. Pollock, Gene Edward. "Bulk Feed and Grain Bank Operations at Ohio Country Elevators." M.S. Thesis. Ohio State Univ., 1961.
42. Rohman, Salir Abdur. "Linear Programming of Least-Cost Feed Mixes with Probability Restrictions." M.S. Thesis. Univ. Md., 1969.
43. Roper, Orson B. "A Description of the Policies and Procedures of Retail Feed Dealers in Utah, 1958." M.S. Thesis. Utah State Univ., 1961.
44. Schairer, Erman Edward. "An Economic Analysis of Alternative Methods of Feed Processing on Illinois Hog Farms." M.S. Thesis. Univ. Ill., 1968.
45. Schlagel, M. L. "An Economic Analysis of Commercial Feed Retailing in Certain Great Plains and Mountain States." M.S. Thesis. Univ. of Wyo., June 1972.
46. Schoonover, David Marion. "The Effects of Transportation and Production Costs on Optimum Size and Distribution System for Mixed Feed Plants." M.S. Thesis. Univ. Ky., 1960.
47. Schmidt, Carl D. "Structure, Behavior and Price Determination in Selected Retail Dairy Feed Markets in Kentucky." Univ. Ky., 1968.
48. Smith, Blair Joseph. "Least-Cost Feed Formulation Through Linear Programming and Allegation Techniques." M.S. Thesis. Pa. State Univ., 1958.
49. Smith, Wade Tice. "Projections Relating to Kansas Livestock Feed Production, 1975." M.S. Thesis. Kans. State Univ., 1962.
50. Snyder, Harold Edward. "The Impact of Marketing Developments on Local Feed Mills." M.S. Thesis. Purdue Univ., 1963.

51. Stafford, Joseph H. "Application of an Assembly Model in Feed Manufacturing." M.S. Thesis. Purdue Univ., 1962.
52. Stone, George William. "An Analysis of Methods and Practices Used in Retail Feed Distribution in Illinois." M.S. Thesis. Univ. Ill., 1955.
53. Stratton, R. L. "An Analysis of the Arkansas Feed Grain Market with Projections to 1980." M.S. Thesis. Univ. Ark., 1975.
54. Stuart, Clyde Arthur, Jr. "Economies of Size in Soybean Processing Plants." M.S. Thesis. Univ. Ark., 1969.
55. Trimble, Richard L. "The Use of Supply Credit by Hog Feed Dealers in Central Illinois." M.S. Thesis. Univ. Ill., 1970.
56. Turner, Elbert F., Jr. "The Economics of Feed Storage and Processing on Northeast Missouri Livestock Farms." M.S. Thesis. Univ. Mo., 1969.
57. Wilson, John Crisler. "Feed Ingredient Utilization Projections for Mississippi." M.S. Thesis. Miss. State Univ., 1966.

## FERTILIZER

### Books

1. Blake, Michael. Concentrated Incomplete Fertilizers: Their Use and Abuse in Price Review Agriculture. London, England: Lockwood, 1967.
2. Baum, Emanuel L. Economic and Technical Analysis of Fertilizer Innovations and Resource Use. Ames, Iowa: Iowa State College Press, 1957.
3. Baum, E. L., E. O. Heady, and J. Blackmore. Economic Analysis of Fertilizer Use Data. Ames, Iowa: Iowa State College Press, 1956.
4. Fertilizer Marketing. New York, N.Y.: Unpub., 1979.
5. Greenberg, E. Regulation, Market Prices and Process Innovation: The Case of the Ammonia Industry. Boulder, Colo.: Westview Press, 1979.
6. Honti, G. D. The Nitrogen Industry. New York, N.Y.: Int'l. Pubcns. Serv., 1977.

7. Markham, Jesse William. The Fertilizer Industry: Study of the Imperfect Market. Nashville, Tenn.: Vanderbilt Univ. Press, 1958.
8. Moldovan, I. The Technology of Mineral Fertilizers. New York, N.Y.: Int'l. Pubcns. Serv., 1970.
9. Olson, R. A. (ed.) Fertilizer Technology and Use. Madison, Wis.: Amer. Soc. Agron., 1971.
10. Sittig, M. Fertilizer Industry: Processes, Pollution Control, and Energy Conservation. Park Ridge, N.J.: Noyes Press, 1979.
11. Wahba, C. (ed.) British Sulphur Corp. Ltd. World Directory of Fertilizer Manufacturers. 4th ed. New York, N.Y.: Int'l. Pubcns. Serv., 1977.
12. World Guide to Fertilizer Plant and Equipment. New York, N.Y.: Int'l. Pubcns. Serv., 1973.

#### Journals

1. Baum, E. L., and S. L. Clement. "The Changing Structure of the Fertilizer Industry in the United States," Journal of Farm Economics, Vol. 40, No. 5 (Dec. 1958), pp. 1186-1200.
2. Benson, R. A. "Trade Credit in the Fertilizer Industry: Theory and Practice," Agricultural Finance Review, Vol. 30 (July 1969), pp. 21-33.
3. Berry, J. E., E. D. Smith, and R. W. Rudd. "Pricing in Kentucky Fertilizer Markets," Journal of Farm Economics, Vol. 47, No. 2 (May 1965), pp. 296-310.
4. Brake, J. R. "Fertilizer Demand in the South Atlantic and East North Central Regions," Journal of Farm Economics, Vol. 42, No. 3 (Aug. 1960), pp. 676-86.
5. Carman, H. F. "The Demand for Nitrogen, Phosphorous and Potash Fertilizer Nutrients in the Western United States," Western Journal of Agricultural Economics, Vol. 4, No. 1 (July 1979).
6. Disney, R., and H. Aragan. "The Choice of Technology in the Production of Fertilizer: A Case Study of Ammonia and Urea," World Development, Vol. 5, No. 9/10 (Sept.-Oct. 1977), pp. 853-66.

7. Finke, J. "Nitrogen Fertilizer: Price Levels and Sales in Illinois 1945-1971," Illinois Agricultural Economics, Vol. 13, No. 1 (Jan. 1973), pp. 34-40.
8. Griliches, Z. "The Demand for Fertilizer in 1954: An Inter-State Study," American Statistical Association Journal, Vol. 54 (June 1959), pp. 377-84.
9. \_\_\_\_\_. "Distribution Lags, Disaggregation and Regional Demand Functions for Fertilizer", Journal of Farm Economics, Vol. 41, No. 1 (Feb. 1959), pp. 90-102.
10. \_\_\_\_\_. "Are Farmers Irrational?" Journal of Political Economy, Vol. 68, No. 1 (Feb. 1960), pp. 68-71.
11. \_\_\_\_\_. "The Demand for Fertilizer: An Economic Interpretation of Technical Change," Journal of Farm Economics, Vol. 40, No. 3 (Aug. 1958), pp. 591-606.
12. Heady, E. O., and M. H. Yeh. "National and Regional Demand Functions for Fertilizer," Journal of Farm Economics, Vol. 41, No. 2 (May 1959), pp. 332-48.
13. Markham, J. W. "Are Farmers Irrational?" Journal of Political Economy, Vol. 68, No. 6 (Dec. 1960), pp. 630-33.
14. Martin, W. H. "Public Policy and Increased Competition in the Synthetic Ammonia Industry," Quarterly Journal of Economics, Vol. 73, No. 3 (Aug. 1959), pp. 374-80.
15. Rausser, G. C., and T. F. Moriak. "The Demand for Fertilizer 1939-64: An Analysis of Coefficients from Periodic Crosssections," Agricultural Economics Research, Vol. 22, No. 2 (Apr. 1970), pp. 45-56.
16. Renshaw, E. F. "Distributed Lags, Technological Change and the Demand for Fertilizer," Journal of Farm Economics, Vol. 43, No. 4 (Nov. 1961), pp. 955-64.
17. Ridzon, D. S. "Wages in Fertilizer Plants," Monthly Labor Review, Vol. 95, No. 8 (Aug. 1972), pp. 40-41.
18. Ruttan, V. W. "Positive Policy in the Fertilizer Industry," Journal of Political Economy, Vol. 68, No. 6 (Dec. 1960), p. 634.



19. Taylor, C., and E. R. Swanson. "Economic Impact of Imposing Per Acre Restrictions of Nitrogen Fertilizer in Illinois," Illinois Agricultural Economics, Vol. 14, No. 2 (July 1974), pp. 1-5.
20. Walsh, R. G., and R. A. Rathjen. "Structural Implications of the Price-to-Minimum-Cost Gap in Anhydrous Ammonia Production and Distribution," Journal of Farm Economics, Vol. 45, No. 5 (Dec. 1963), pp. 1380-85.

U.S. Department  
of Agriculture

1. Abrahamsen, M. A., and C. L. Scroogs, Problems of Western Cooperatives in Obtaining and Distributing Fertilizer. GR-11. U.S. Dept. Agr., Farmer Coop. Serv., Dec. 1954.
2. Altobello, M. A., and others. The Changing U.S. Fertilizer Industry. AER-378. U.S. Dept. Agr., Econ. Res. Serv., Aug. 1977.
3. Conyers, L. N. Transportation Factors in Locating Cooperative Fertilizer Plants in Arkansas. AR-6. U.S. Dept. Agr., Farmer Coop. Serv., Feb. 1954.
4. Eichers, T. R. Cooperative Bulk Fertilizer Blending in the Upper Midwest. GR-122. U.S. Dept. Agr., Farmer Coop. Serv., July 1964.
5. Ibach, D. B. Fertilizer Use in the United States: Its Economic Position and Outlook. AER-92. U.S. Dept. Agr., Econ. Res. Serv., May 1966.
6. \_\_\_\_\_, and R. E. Marx. Fertilizer and Lime Used on Crops and Pasture, 1947. FM-86. U.S. Dept. Agr., Bur. Agr. Econ., June 1951.
7. Mahan, J. N. Fertilizer Supply 1970-71. BI-970-71. U.S. Dept. Agr., Agr. Stab. Cons. Serv., Apr. 1971.
8. \_\_\_\_\_. Fertilizer Supply 1971-72. BI-971-72. U.S. Dept. Agr., Agr. Stab. Cons. Serv., Apr. 1972.
9. \_\_\_\_\_. Nitrogen, Phosphate, Potash, Fertilizer Supply 1972-73. BI-972-73. U.S. Dept. Agr., Agr. Stab. Cons. Serv., Apr. 1973.
10. Mather, J. W. Cooperative Fertilizer Marketing and Manufacturing; 1949/50-1969/70: Plant Capacities in 1972. RR-24. U.S. Dept. Agr., Farmer Coop. Serv., May 1973.

11. Paul, D. A., and R. L. Kilmer. The Manufacturing and Marketing of Nitrogen Fertilizers in the U.S. AER-390. U.S. Dept. Agr., Econ. Res. Serv., Dec. 1977.
12. Paul, D. A. The Changing U.S. Fertilizer Industry. AER-378. U.S. Dept. Agr., Econ. Res. Serv., Aug. 1977.
13. Pentecost, B. H. Liquid Fertilizer Distribution by Local Cooperatives in the Pacific Northwest. GR-95. U.S. Dept. Agr., Farmer Coop. Serv., Aug. 1961.
14. \_\_\_\_\_. Liquid Nitrogen, Distribution by Local Cooperatives in Nebraska and Kansas. GR-82. U.S. Dept. Agr., Farmer Coop. Serv., July 1960.
15. Scholl, W., M. M. Davis, and C. A. Wulker. Consumption of Commercial Fertilizers and Primary Plant Nutrients in the United States, Year Ended June 30, 1959. ARS-41-19-3. U.S. Dept. Agr., Agr. Res. Serv., Sept. 1960.
16. \_\_\_\_\_, and others. Consumption of Commercial Fertilizers and Primary Plant Nutrients in the United States, Year Ended June 30, 1958. ARS-41-19-2. U.S. Dept. Agr., Agr. Res. Serv., Aug. 1959.
17. \_\_\_\_\_. Commercial Fertilizers and Primary Plant Nutrients Consumption in the United States, Year Ended June 30, 1956. ARS-41-19. U.S. Dept. Agr., Agr. Res. Serv., June 1957.
18. Scroggs, C. L., and R. J. Byrne. Cooperative Fertilizer Transportation in the North Central States. GR-7. U.S. Dept. Agr., Farmer Coop. Serv., June 1954.
19. Trotter, W. K. Manufacture of Fertilizer by Cooperatives in the South. FCS B-13. U.S. Dept. Agr., Farmer Coop. Serv., July 1959.
20. \_\_\_\_\_. Distribution of Fertilizer by Cooperatives in the South. FSC B-11. U.S. Dept. Agr., Farmer Coop. Serv., Oct. 1958.
21. \_\_\_\_\_. Bulk Distribution of Fertilizer and Lime in the Northeast. AIB-2. U.S. Dept. Agr., Farmer Coop. Serv., June 1956.

22. U.S. Department of Agriculture, Statistical Reporting Service. Consumption of Commercial Fertilizers and Primary Plant Nutrients in the U.S., 1850-1964, and by States, 1945-64. SB-375, June 1966.
23. \_\_\_\_\_, Statistical Reporting Service. Commercial Fertilizer: Consumption of Commercial Fertilizer. Primary Plant Nutrients and Micronutrients. SB-472. Nov. 1976.
24. \_\_\_\_\_, Statistical Reporting Service. Commercial Fertilizer Consumption in the U.S. for Year Ended June 1977. Published annually.
25. \_\_\_\_\_, Economic Research Service. Fertilizer Situation. Supp. No. 1 to FS5. Published annually.
26. \_\_\_\_\_, Farmer Cooperatives Service. Cooperative Farm Fertilizer Costs. RR-8, May 1979.
27. Vogelsang, D. L. Cooperative Farm Fertilizer Costs. RR-8. U.S. Dept. Agr., Farmer Coop. Serv., May 1979.

#### Experiment Stations

1. Abbott, J. Appraising the Market Structure for Fertilizer. Ill. Agr. Exp. Sta. AE-3763, 1962.
2. Anderson, D. G., J. L. Jorgensen, and D. C. Nelson. Economies of Size and Plant Utilization in Distribution of Anhydrous Ammonia Fertilizer to Nebraska Farmers. Neb. Agr. Exp. Sta. SB-530, Dec. 1973.
3. Anderson, M. A., and others. An Appraisal of Factors Affecting the Acceptance and Use of Fertilizer in Iowa, 1953. Iowa Agr. Exp. Sta. Spec. Rep. 16, June 1956.
4. Armstrong, J. H. Growth Policies and Practices of Local Fertilizer Bulk Blending Plants in Indiana. Ind. Agr. Exp. Sta. Res. PR-114, Mar. 1964.
5. \_\_\_\_\_, and W. E. Pettigrew. Price Variation in Fertilizer Mixtures and Materials. Ind. Agr. Exp. Sta. Res. Bull. 812, July 1966.
6. Beasley, L. W., and W. F. Woolf. Costs as Related to Source and Method of Application of Selected Fertilizer Materials in Louisiana. La. Agr. Exp. Sta. DAE Rep. 431, June 1971.



7. Berry, J. E., E. D. Smith, and R. W. Rudd. Selected Factors Affecting the Price of Fertilizer in Kentucky Retail Markets. Ky. Agr. Exp. Sta. Bull. 698, June 1965.
8. Boehlje, M. D., and C. E. Rousch. Trade Credit in the Oklahoma Fertilizer Industry. Okla. Agr. Exp. Sta. Rep. P-649, July 1971.
9. Bond, B. J., and E. R. Swanson. A Cost Analysis of Fertilizer Bulk-Blending Plants in Illinois. Ill. Agr. Exp. Sta. Bull 632, June 1958.
10. \_\_\_\_\_, and H. G. Walkup. Bulk Blending - An Innovation in Fertilizer Marketing (with Special Reference to Illinois). Univ. Ill. in cooperation with TVA, Knoxville, Tenn., Sept. 1958.
11. Bucy, J. I., and F. P. Achorn. Economic Analysis of Bulk Blending and Liquid Fertilizer Plants for Iowa. 64th Annual Convention of the Iowa Grain and Feed Dealers Association, Des Moines, Iowa, Nov. 1963.
12. Carman, H. F., and C. Heaton. The Demand for Commercial Fertilizers in California Projected to 1985. Univ. Calif., Giannini Found. of Agr. Sci. Info. Series 77-5, June 1977.
13. Dahl, D. C., William G. Bursch, and Robert A. Rathjen. The Minnesota Fertilizer Industry: Trends and Prospects. Minn. Agr. Exp. Sta., Misc. Rep. 76, 1970.
14. \_\_\_\_\_, and W. W. Grant. The Fertilizer Problem-Situation and Outlook. Minn. Agr. Econ. No. 559, Sept. 1974.
15. \_\_\_\_\_, and R. J. Magnani. Structural Changes in Minnesota Fertilizer Distribution. Minn. Agr. Econ. No. 602, Aug.-Sept. 1978.
16. Daniel, R., and J. Hawliceck, Jr. Fertilizer Purchasing Patterns of Farmers, 1960-65. Purdue Univ. Agr. Exp. Sta., Res. Rep. 375, June 1970.
17. DrZnka, T. P., C. P. Baumel, and J. J. Miller. Estimating Rail Transport Costs for Grain and Fertilizer. Mo. Agr. Exp. Sta., Res. Bull. 1028, June 1978.
18. Finley, R. M., J. I. Bucy, and J. R. Douglas. Minimum Cost Mixing for a Bulk Blending Fertilizer Plant. Nebr. Agr. Exp. Sta. SB 466, Oct. 1961.



19. Fudge, J. F. Distribution of Fertilizer Sales in Texas.  
Tex. Agr. Exp. Sta. PR (annual rep: 1947-61).
20. Fuqua, J. E., and H. G. Walkup. Bulk Fertilizer Spreading Practices in Kentucky - With Special Emphasis on Three-Hopper Truck Spreader Services. Ky. Agr. Exp. Sta. Bull. 683, May 1963.
21. \_\_\_\_\_. Three - Hopper Truck Fertilizer Spreaders - An Economic Evaluation. Ky. Agr. Exp. Sta., Dec. 1964.
22. Hinkle, D. A. Fertilizer and Lime Sales in Arkansas 1956 to 1960. Ark. Agr. Exp. Sta. Rep. Serv. 115, Nov. 1962.
23. \_\_\_\_\_. Fertilizer and Lime Sales in Arkansas 1956 to 1960. Ark. Agr. Exp. Sta. Rep. Serv. 103, Jan. 1962.
24. \_\_\_\_\_. Fertilizer and Lime Sales in Arkansas, 1951-1955. Ark. Agr. Exp. Sta. Rep. Serv. 59, Oct. 1956.
25. Irwin, G. D., and J. V. Mannering. Fertilizer Use on Crops and Pasture in Indiana: 1964 Estimates With Comparisons to 1959 and 1954. Ind. Agr. Exp. Sta. Res. PR-307, May 1967.
26. Janssen, M. R., and A. J. Ahlrogge. Use of Fertilizer on Principle Crops in Indiana, 1954. Ind. Agr. Exp. Sta. Mimeo ID-15, Mar. 1957.
27. \_\_\_\_\_, J. H. Armstrong, and S. A. Barber. Fertilizer Use in Indiana. Ind. Agr. Exp. Sta. Res. PR-81, Sept. 1963.
28. Karraker, P. E. Fertilizers - Their, Purchase and Use on Field Crops. Ky. Agr. Exp. Sta. Circ. 70, June 1951.
29. Lawler, W. G. Serving the Farmer with Fertilizer and Chemicals: How Far Do We Go? Ill. Agr. Exp. Sta. AE-3661, 1961.
30. Long, R. B., R. W. Schermerhorn, and R. L. Sargent. Fertilizer Use in Idaho - Too Much or Too Little? Univ. Idaho Agr. Exp. Sta. Curr. Info. Series No. 383, Mar. 1977.

31. Long, R. B., D. Peterson, and G. A. Hines. The Structure of Demand for Fertilizer in Idaho. Univ. Idaho Agr. Exp. Sta. Bull. 98, Nov. 1976.
32. Lyons, W. G. Serving the Farmer With Fertilizer and Chemicals Helping Farmers Determine Their Needs. Ill. Agr. Exp. Sta. AE-3661, Apr. 1961.
33. Mullins, J., and J. R. Ballard. Fertilizer Use on Crops and Pastures in Arkansas, 1959 and 1964. Ark. Agr. Exp. Sta. Rep. Serv. 166, Dec. 1967.
34. Mutti, R. J. Variations in Use of Fertilizer Within Illinois. Ill. Agr. Exp. Sta. ERR-132, Jan. 1975.
35. Myers, O. Serving the Farmer With Fertilizer and Chemicals: How Many Types of Analysis Should be Provided? Ill. Agr. Exp. Sta. AE-3661, Sept. 1961.
36. Nybroten, N., and J. H. Clarke. Lime and Fertilizer Distribution Practices of the Eastern Panhandle of West Virginia. W. Va. Agr. Exp. Sta. Bull. 389, May 1956.
37. Peterson, R. D., and D. C. Dahl. Markets for Purchased Farm Inputs in the Western Region: Feed, Fertilizer, Farm Machinery. Colo. State Univ. Agr. Exp. Sta. Bull. 560S, Sept. 1974.
38. Rogers, E. M., and A. E. Havens. The Impact of Demonstrations on Farmer Attitudes Toward Fertilizer. Ohio Agr. Exp. Sta. Res. Bull. 896, Dec. 1961.
39. Rousch, C., and M. Boehlje. Trade Credit and Receivables Management in the Oklahoma Fertilizer Industry. Okla. State Univ. Agr. Exp. Sta. Bull. 709, June 1973.
40. Rudel, R. K., and R. G. Walsh. Effect of Vertical Integration on Profit-Ability of Ammonia and Solution Fertilizer Retailing by Cooperatives. Nebr. Agr. Exp. Sta. SB-512, Feb. 1970.
41. Schnell, W. R., and others. Availability of Phosphate Fertilizer Materials in Calcereous Soils in Colorado. Colo. Agr. Exp. Sta. Tech. Bull. 58, Nov. 1955.
42. Sorenson, V. L., and C. W. Hall. Handling Fertilizer in Bulk: A Study of Costs. Mich. Agr. Exp. Sta. Spec. Bull. 408, 1956.

43. Stippler, H. H. Fertilizer Use: Columbia Basin Wheat - Summerfallow Area. Oreg. Agr. Exp. Sta. C. Info. 576, Apr. 1957.
44. Swanson, E. R., C. R. Taylor, and P. J. Van Blokland. Economic Effects of Controls on Nitrogen Fertilizer. Ill. Agr. Exp. Sta. Bull. 757, Apr. 1978.
45. Voelker, S. W., and M. J. Nordbo. Statistics on Fertilizer Consumption in North Dakota. N. Dak. Agr. Exp. Sta., Dec. 1962.
46. Walsh, R. G., and R. A. Rathjen. Nebraska Farmers Spend \$50 Million A Year for Fertilizer. Neb. Exp. Sta. Qtrly, fall 1962.
47. Woodall, C. E., J. M. Stepp, and J. L. Madden. An Economic Analysis of Fertilizer Purchasing Practices of Farm Owner-Operators in Marlboro County. S. C. Agr. Exp. Sta. AE-191, Feb. 1961.
48. Woodworth, H. C. Farmer's Attitudes, Knowledge and Use of Fertilizer. Ga. Agr. Exp. Sta. Bull. 81, Mar. 1961.
49. Woolf, W. F., and L. W. Beasley. An Economic Analysis of Commercial Fertilizer Prices in Louisiana. La. Agr. Exp. Sta. DAE RR-428, June 1971.
50. Yeager, J. H., O. D. Belcher, and H. G. Walker. Fertilizer Use and Practices by Alabama Farmers. Ala. Agr. Exp. Sta. Bull. 320, Jan. 1960.

Ph.D. Dissertations

1. Anderson, Marvin A. "Factors Affecting Acceptance and Use of Fertilizer on Iowa Farms." Ph.D. Dissertation. Iowa State Univ., 1956.
2. Berry, Calvin Randal. "An Economic Analysis of Fertilizer Marketing and Pricing With Particular Reference to Indiana." Ph.D. Dissertation. Purdue Univ., 1958.
3. Bond, Billy Joe. "An Economic Analysis of Local Fertilizer Mixing Plant Operation and Location in Illinois." Ph.D. Dissertation. Univ. Ill., 1960.
4. Brake, John Ronald. "Predicition of Fertilizer Consumption in Two Regions of the United States." Ph.D. Dissertation. N.C. State College, 1960.



5. Brints, C. L. "The Economics of Information in Purchasing Feed and Fertilizer in Minnesota." Ph.D. Dissertation. Univ. Minn., 1973.
6. Bunker, A. R. "Impact of Rail Line Abandonment on Agricultural Production and Associated Grain Marketing and Fertilizer Supply Firms." Ph.D. Dissertation. Univ. Ill., 1976.
7. Daniel, Raymond. "An Economic Analysis of the Farmer Demand for Fertilizer Nutrients." Ph.D. Dissertation. Purdue Univ., 1970.
8. Desai, Gunvantrai Magonlal. "Growth of Fertilizer Use in Indian Agriculture - Past Trends and Future Demand." Ph.D. Dissertation. Cornell Univ., 1969.
9. Douglas, John Robert, Jr. "Use of Linear Programming Techniques in the Fertilizer Industry." Ph.D. Dissertation. Iowa State Univ., 1967.
10. Gray, Robert Copping. "The Development, Structure and Regulation of the Fertilizer Industry in Virginia." Ph.D. Dissertation. Va. Poly. Inst., 1963.
11. Heerema, Douglas Lee. "Benefit-Cost Analysis of Pakistan Fertilizer Plants." Ph.D. Dissertation. Univ. Iowa, 1966.
12. Henderson, D. R. "Fertilizer Consumption and Industry Adjustment." Ph.D. Dissertation. Mich. State Univ., 1971.
13. McClure, T. A. "An Economic Analysis of Retail Fertilizer Plant Operations in the Midwestern United States." Ph.D. Dissertation. Ohio State Univ., 1972.
14. Malone, G. W. "A Simulation Analysis of the Behavioral and Operational Characteristics of a Fertilizer Supply Firm." Ph.D. Dissertation. Purdue Univ., 1972.
15. Marhatta, H. P. "The Economics of Fertilizer: Alternatives for Avoiding a Shortage." Ph.D. Dissertation. Univ. Conn., 1976.
16. Palmini, D. J. "The Regional Economic Impact on Illinois Agriculture of Environmental Controls on Nitrogen Fertilizer Use: A Linear Programming Analysis." Ph.D. Dissertation. Univ. Ill., 1975.

17. Perkins, G. R. "Attaining the Long Run Minimum Cost Re-organization of the Michigan Fertilizer Industry." Ph.D. Dissertation. Mich. State Univ., 1972.
18. Rathjen, Robert A. "An Economic Analysis of Fertilizer Retailing in Minnesota." Ph.D. Dissertation. Univ. Minn., 1970.
19. Reiling, Eldon Alvin. "Demand Analysis for Commercial Fertilizer in the United States, by States." Ph.D. Dissertation. Mich. State Univ., 1966.
20. Robertson, Thyrell. "Structure, Performance and Conduct of the Peruvian Fertilizer Industry and a Linear Programming Analysis for Future Plant Sizes and Locations." Ph.D. Dissertation. Iowa State Univ., 1968.
21. Rudel, R. K. "Economics of the U.S. Ammonia Industry." Ph.D. Dissertation. Colo. State Univ., 1973.
22. Schaub, John Richard. "A Study of a Retail Fertilizer Market in a Selected Portion of Illinois, 1964." Ph.D. Dissertation. Univ. Ill., 1966.
23. Shatava, J. W. "An Estimate of the Benefits Derived from the Use of Commercial Fertilizer and Pesticides in Agriculture." Ph.D. Dissertation. Univ. Minn., 1973.
24. Stewart, W. S. "An Economic Analysis of Agricultural Lime Vending - A Case Study." Ph.D. Dissertation. Univ. Miss., 1977.
25. Tollini, Helio. "Actual and Optimal Use of Fertilizer." Ph.D. Dissertation. N.C. State Univ., 1969.
26. Walker, Melvin E., Jr. "An Economic Evaluation of the Impact of the Commercial Nitrogen Control at the Farm Level." Ph.D. Dissertation. Univ. Ill., 1974.
27. Wells, J. A. "Economic Analysis of Fluid Mixed Fertilizer Plants in the Midwest Area of the U.S." Ph.D. Dissertation. Univ. Ill., 1970.
28. Yeh, Hsiang Hsing. "Fertilizer Demand Functions of United Farmers." Ph.D. Dissertation. Iowa State Univ., 1959.

M.S. Theses

1. Belcher, Owen Douglas. "Farmers' Use of Fertilizer in Alabama." M.S. Thesis. Auburn Univ., 1959.
2. Bone, William Russell. "Economic Problems in the Fertilizer Industry." M.S. Thesis. Univ. Ill., 1951.
3. Breuer, William David. "An Analysis of Bulk Fertilizer Operations and the Effects on Alternative Methods of Distribution in Ohio." M.S. Thesis. Ohio State Univ., 1958.
4. Edens, Marshall. "The Kinds, Amounts, Uses and Costs of Fertilizer in West Virginia." M.S. Thesis. Univ. W. Va., 1957.
5. Ernest, R. K. "Conduct in Colorado's Fertilizer Markets." M.S. Thesis. Colo. State Univ., 1972.
6. Giessler, Frederick William. "An Analysis of Ohio Liquid Fertilizer Plants and a Comparison with Bulk, Dry Fertilizer Plants." M.S. Thesis. Ohio State Univ., 1960.
7. Groscost, Willard D. "A System for Analyzing the Performance of a Fertilizer Blend." M.S. Thesis. Purdue Univ., 1969.
8. Gustafson, Mark Rand. "Performance of Cooperatives in the U.S. Fertilizer Industry: Potential Role in Latin American Fertilizer Development." M.S. Thesis. Univ. Neb., 1968.
9. Hawkinson, A. E., Jr. "An Economic Analysis of the Wyoming Retail Fertilizer Industry." M.S. Thesis. Univ. Wyo., 1972.
10. Heffelbower, Charles D. "Structural Variables Affecting the Average Price of Nitrogen Fertilizer, 1951-61." M.S. Thesis. Univ. Neb., 1963.
11. Herzinger, Kim C. "An Evaluation of Supply Credit Extended by Feed and Fertilizer Retailers in Effingham and Woodford Counties, Illinois." M.S. Thesis. Univ. Ill., Jan. 1977.
12. Heubrock, A. L. "A Cost Analysis of Anhydrous Ammonia Fertilizer Retailing in North Central Iowa." M.S. Thesis. Iowa State Univ., 1972.



13. James, G. C. "The Florida Commercial Fertilizer Industry." M.S. Thesis. Univ. Fla., 1951.
14. Johnson, James R. "Vertical Integration into the Distribution of Fertilizer." M.S. Thesis. Univ. Neb., 1968.
15. Kawamoto, Yasuo. "A Study of a Chemical Fertilizer Company in Japan." M.S. Thesis. Cornell Univ., 1966.
16. Knisely, T. K. "An Economic Analysis of the Farmer's Alternatives in Using Commercial Fertilizer on Corn and Soybeans." M.S. Thesis. Purdue Univ., 1973.
17. Kriesel, Ronald F. "Changes in Market Structure and Costs of Liquid Fertilizer Blending." M.S. Thesis. Univ. Neb., 1968.
18. McLaughlin, L. R. "An Investigation of Differences in Prices Paid for Fertilizer and in Services Received by Illinois Farmers, 1966." M.S. Thesis. Univ. Ill., 1974.
19. Madden, John L. "An Economic Analysis of Fertilizer Purchasing Practices of Farm Owner-Operators in Marlboro County, South Carolina." M.S. Thesis. Clemson Univ., 1958.
20. Mankin, J. A. "Effect of Cooperatives and Other Market Structure Variables on Ammonium Nitrate and Anhydrous Ammonia Pricing, 1951-72." M.S. Thesis. S. Dak. State Univ., 1974.
21. Mennem, Gary Max. "An Experiment in the Use of Farm Programming by Fertilizer Dealers as a Service to Farmers." M.S. Thesis. Okla. State Univ., 1969.
22. Miller, K. A. "Management Information System for the Retail Fertilizer Industry." M.S. Thesis. Purdue Univ., 1971.
23. Miller, Keith L. "Customer Services in the Retail Fertilizer Market." M.S. Thesis. Purdue Univ., 1970.
24. Miller, Raymond L. "Cost Comparisons of Nitrogen Fertilizer Applied in Bulk Dry and Liquid Form by Various Application Methods." M.S. Thesis. N. Dak. State Univ., 1962.

25. Moench, J. M. "Analysis of the North Dakota Fertilizer Markets." M.S. Thesis. N. Dak. State Univ., 1976.
26. Neal, W. C. "The Structure of the Michigan Retail Fertilizer Industry." M.S. Thesis. Mich. State Univ., 1970.
27. Nesselroad, Paul E. "The Kinds and Quantities and Costs of Lime Materials Used by West Virginia Farmers." M.S. Thesis. Univ. W. Va., 1955.
28. Pettigrew, William Edward, Jr. "Fertilizer Pricing and Distribution Practices in Central Indiana." M.S. Thesis. Purdue Univ., 1965.
29. Rathjen, Robert A. "Structural Trends and Economies of Scale in Fertilizer Retailing." M.S. Thesis. Univ. Neb., 1963.
30. Rezelman, J. R. "Economic Analysis of the New York Fertilizer Industry". M.S. Thesis. Cornell Univ., 1971.
31. Rueter, Richard G. "The U.S. Nitrogen Industry: Economies of Plant Size and Utilization Projected to 1970." M.S. Thesis. Univ. Neb., 1966.
32. Sharp, D. D. "Colorado's Fertilizer Industry Structure." M.S. Thesis. Colo. State Univ., 1971.
33. Smith, Allen Glen. "Effects of Credit Restraints on Farm Outlays for Fertilizer and Operating Inputs." M.S. Thesis. Univ. Ill., 1966.
34. Sonstegard, Gary D. "Conditions of Entry Into the Phosphate Fertilizer Industry, 1965-76." M.S. Thesis. Univ. Neb., 1967.
35. Welty, J. C. "Market Structure Analysis of Fertilizer Distribution in Utah." M.S. Thesis. Utah State Univ., 1973.

Completed Current  
Research Infor-  
mation System  
(CRIS) Projects

1. Baumel, C. P. "Transportation and Distribution Systems for Moving Grain and Fertilizer Through Deepwater Ports." Iowa State Univ., Ames, Iowa. Period: 4-22-76 to 9-30-79. Objectives: Projects the amounts of grain and dry fertilizer through deepwater ports on the Mississippi River by 1980; estimates structural adjustments needed to minimize cost of handling and

transporting grain and dry fertilizer, as well as structural adjustments required when using rail facilities.

2. \_\_\_\_\_. "Alternative Systems for Transporting Agricultural Outputs to Markets and Inputs to Production Areas." Iowa State Univ., Ames, Iowa. Period: 7-1-74 to 6-30-79. Objectives: Determines the optimal transportation systems and facilities needed for transporting grain and fertilizer to maximize producer income.
3. Vogelsang, D. L. "The Enhancement of Competition From a Cooperative Presence in the Fertilizer Industry." Univ. Minn., St. Paul, Minn. Period: 6-1-77 to 9-30-79. Objectives: Determines the competitive enhancement of competition from farmer cooperatives by measuring differences in the farm cost of cooperative and noncooperative fertilizers; and determined the cooperative's impact on industry structure and cost.

## FINANCE

### Books

1. Baum, E. L. Capital and Credit Needs in a Changing Agriculture. Ames, Iowa: Iowa State Univ. Press, 1961.
2. Brake, J. R., and E. Melichar. Agricultural Finance and Capital Markets. Part 6 in a survey of agricultural economics literature, Vol. 1. Ed. Lee R. Martin. Minneapolis, Minn.: Univ. Minn. Press, 1977.
3. Brake, J. R. Capital and Credit. Chapt. 8 in Size, Structure, and Future of Farms. Ed. A. Gordon Ball and E. O. Heady. Ames, Iowa: Iowa State Univ. Press, 1972, pp. 123-143.
4. Hopkin, J. A., P. J. Barry, and C. B. Baker. Financial Management in Agriculture. Danville, Ill.: The Interstate Printers & Pub., Inc., 1973.
5. Hoag, W. G. Farm Credit System. Danville, Ill.: The Interstate Printers & Pub., Inc., 1976.
6. Nelson, A. G., W. F. Lee, and W. G. Murphy. Agricultural Finance. Ames, Iowa: Iowa State Univ. Press 1973.



## Journals

1. Atkinson, J. H., and L. J. Wallace. "Institutional Change and Capital Control in Agriculture," Journal of Farm Economics, Vol. 44, No. 5 (Dec. 1962), pp. 1735-39.
2. Baker, C. B. "Instability in the Capital Markets of U.S. Agriculture," American Journal of Agricultural Economics, Vol. 59, No. 1 (Feb. 1977), pp. 170-77.
3. Baker, C. B., and J. A. Hopkin. "Concepts of Finance Capital for a Capital Using Agriculture," American Journal of Agricultural Economics, Vol. 51, No. 5 (Dec. 1969), pp. 1046-54.
4. Barry, P. J., and C. B. Baker. "Reservation Prices on Credit Use: A Measure of Response to Uncertainty," American Journal of Agricultural Economics, Vol. 53, No. 2 (May 1971), pp. 222-27.
5. Barry, P. J., and J. A. Hopkin. "Financial Intermediation in Agriculture: A Suggested Analytical Model," Southern Journal of Agricultural Economics, Vol. 4, No. 1 (July 1972), pp. 179-84.
6. Bottomly, A. "The Structure of Interest Rates in Under-developed Rural Areas," Journal of Farm Economics, Vol. 46, No. 2 (May 1964), pp. 312-22.
7. Brake, J. R. "Farm Finance and National Economic Policy - Some Gaps in Knowledge," American Journal of Economics, Vol. 56, No. 5 (Dec. 1974), pp. 1056-62.
8. \_\_\_\_\_. "An Assessment of the Credit Recommendations of the Federal Task Force on Agriculture," Canadian Journal of Agricultural Economics, Vol. 19, No. 1 (Oct. 1971), pp. 86-89.
9. \_\_\_\_\_. "The Money Market-Is It Adequate for the Needs of Today's Agriculture: Discussion," American Journal of Agricultural Economics, Vol. 52, No. 5 (Dec. 1970), pp. 695-96.
10. Colyer, D., and G. Jimenez. "Supervised Credit as a Tool in Agricultural Development," American Journal of Agricultural Economics, Vol. 53, No. 4 (Nov. 1971), pp. 639-42.
11. Diesslin, H. G. "A Re-examination of the Credit Needs of Agriculture," Journal of Farm Economics, Vol. 36, No. 5 (Dec. 1954), pp. 1200-15.

12. Doak, E. J. "Criteria for Assessing Government Financial Institutions and Their Application to Canada's Farm Credit Corporation," Canadian Journal of Agricultural Economics, Vol. 22, No. 3 (Nov. 1974), pp. 35-43.
13. Duft, K. D., and M. J. Carter. "Pooled Reformulation of the Capital Structure of the Banks for Cooperative Systems," Agricultural Finance Review, Vol. 35 (Oct. 1974), pp. 22-30.
14. Duncan, M. "Financial Markets for Agriculture: Discussion," American Journal of Agricultural Economics, Vol. 61, No. 1 (Feb. 1979), pp. 165-66.
15. Frey, T. L., and D. A. Lins. "Use of Credit by Illinois Farmers," Illinois Agricultural Economics, Vol. 12, No. 2 (July 1974), pp. 39-45.
16. Frey, T. L. "Use of Farm Financial Statements in Illinois," Illinois Agricultural Economics, Vol. 15, No. 2 (July 1975), pp. 8-10.
17. Gramm, W. P., and R. T. Nash. "The Impact of Changes in the Stock of Money on Agricultural Income and Investment," Journal of Money Credit and Banking, Vol. 3, No. 3 (Aug. 1971), pp. 709-811.
18. Gray, R. W. "Risk Management in Commodity and Financial Markets," American Journal of Agricultural Economics, Vol. 58, No. 2 (May 1976), pp. 280-85.
19. Gupta, J. R. "Comparative Role of Nationalized and Non-Nationalized Banks in Financing Agriculture and Small Scale Industry-A Review of the Pre-Nationalization and Post-Nationalization Period," Economic Affairs, Vol. 16, No. 5 (May 1971), pp. 219-28.
20. Hatch, R. E. "A Survey of Farm Oriented Credit Available From Commercial Banks in South Central Great Plains," Oklahoma Current Farm Economic, Vol. 45 (213) (June-Sept. 1972), pp. 20-25.
21. Herr, W. M. "Financial Markets in Agriculture," American Journal of Agricultural Economics, Vol. 61, No. 1 (Feb. 1979), pp. 167-69.
22. Hopkin, J. R. "Discussion: Financing Agriculture: Demand for and Supply of Farm Capital and Credit," American Journal of Agricultural Economics, Vol. 55, No. 2 (May 1973), pp. 326-28.

23. Huff, H. B., and T. G. Macaulay. "Summing Components of Real Capital Gains," American Journal of Agricultural Economics, Vol. 55, No. 1 (Feb. 1973), pp. 69-72.
24. Kletke, D. D., and J. S. Plaxico. "Loan Terms and the Land Purchase Decision," Oklahoma Current Farm Economics, Vol. 51, No. 1 (Mar. 1978), pp. 3-12.
25. Ladman, J. R. "An Expanded View of the Demand for Short Term Capital," Canadian Journal of Agricultural Economics, Vol. 18, No. 3 (Nov. 1970), pp. 172-74.
26. Lassiter, R. L. "Structural Changes in Agricultural Finance in Southeastern Florida," Land Economics, Vol. 34, No. 4 (Nov. 1958), pp. 346-49.
27. Lee, J. E. "The Money Market-Is it Adequate for the Needs of Today's Agriculture: Discussion," American Journal of Agricultural Economics, Vol. 52, No. 5 (Dec. 1970), pp. 696-97.
28. Lianos, T. P., and E. H. Parker. "Discrimination in the Markets for Farm Capital? Comment," American Journal of Agricultural Economics, Vol. 54, No. 2 (May 1972), pp. 369-70.
29. Lins, D. A., and T. L. Frey. "Use of Credit by Illinois Farmers," Illinois Agricultural Economics, Vol. 14, No. 2 (July 1974), pp. 39-45.
30. Lins, D. A., and J. B. Penson, Jr. "Financing the Farm Sector in 1974," Illinois Agricultural Economics, Vol. 14, No. 1 (Jan. 1974), pp. 21-25.
31. Melicher, E. "Farm Capital and Credit Projections to 1980," American Journal of Agricultural Economics, Vol. 51, No. 5 (Dec. 1969), pp. 1172-77.
32. \_\_\_\_\_. "Aggregate Farm Capital and Credit Flows Since 1950 and Projections to 1980," Agricultural Finance Review, Vol. 33, (July 1972), pp. 1-7.
33. \_\_\_\_\_. "Financing Agriculture: Demand for and Supply of Farm Capital and Credit," American Journal of Agricultural Economics, Vol. 55, No. 2 (May 1973), pp. 313-25.
34. \_\_\_\_\_. "Some Current Aspects of Agricultural Finance and Banking in the United States," American Journal of Agricultural Economics, Vol. 59, No. 5 (Dec. 1977), pp. 967-72.



35. \_\_\_\_\_. "New Survey of Terms of Bank Lending to Farmers," Agricultural Finance Review, Vol. 39, (May 1978), pp. 53-56.
36. Mishra, G. P., B. N. Tripathy, and R. L. Pandey. "Role of Banking in Financing Rural Credit," Economic Affairs, Vol. 18, No. 7, (July 1973), pp. 313-25.
37. Mitchell, G. "Effects of Automation on the Structure and Functioning of Banking," American Economic Review, Vol. 56 (May 1966), pp. 159-66.
38. Musser, W. N., and F. C. White. "Inflation and Farm Financing: Recent Trends and Projections," Agricultural Finance Review, Vol. 36, (Apr. 1976), pp. 32-41.
39. Pal, D. N. "Agricultural Finance, Commercial Banks, and Cooperatives," Economic Affairs, Vol. 21, No. 6 (June 1976), pp. 219-27, 240.
40. Penson, J. B., Jr. "Toward An Aggregative Measure of Savings and Capital Finance for U.S. Farm Operator Families," American Journal of Agricultural Economics, Vol. 59, No. 1 (Feb. 1977), pp. 49-60.
41. Quinn, O. B. "Sources and Uses of Funds in Agriculture," American Journal of Agricultural Economics, Vol. 56, No. 5 (Dec. 1974), pp. 1063-65.
42. Robinson, L. J., and D. J. Leatham. "Interest Rates Charged and Amounts Loaned by Major Farm Real Estate Lenders," Agricultural Economics Research, Vol. 30, No. 2 (Apr. 1978), pp. 1-9.
43. \_\_\_\_\_, P. J. Barry, and J. A. Hopkin. "Cash Flows and Financing in Texas Agriculture," Southern Journal of Agricultural Economics, Vol. 5, No. 2 (July 1973), pp. 187-92.
44. \_\_\_\_\_, C. B. Baker, and G. K. Brinegar. "A Comparison of Interest Rate Policies of St. Louis Federal Land Bank," Illinois Agricultural Economics, Vol. 12, No. 2 (July 1972), pp. 12-15.
45. Scofield, W. H. "Nonfarm Equity Capital in Agriculture," Agricultural Finance Review, Vol. 33 (July 1972), pp. 36-41.
46. Semenov, V. N. "The Financing of Agriculture," Problems of Economics, Vol. 17, No. 10 (Feb. 1975), pp. 69-88.



47. Sloan, R. "The Money Market-Is it Adequate for the Needs of Today's Agriculture: Discussion," American Journal of Agricultural Economics, Vol. 52, No. 5 (Dec. 1970), p. 695.
48. Smith, A. G., and K. R. Krause. "Financing Future Farm Production-A Look at Three Scenarios," Agricultural Finance Review, Vol. 35 (Oct. 1974), pp. 10-14.
49. Swackhamer, G. L., and R. H. Erickson. "Agriculture's Future Credit Needs and the Farm Credit System," Agricultural Finance Review, Vol. 32 (Aug. 1971), pp. 6-14.
50. Tinney, R., and F. Welch. "Discrimination in the Markets for Farm Capital?" American Journal of Agricultural Economics, Vol. 53, No. 3 (Aug. 1971), pp. 401-10.
51. \_\_\_\_\_. "Discrimination in the Markets for Farm Capital?: Reply," American Journal of Agricultural Economics, Vol. 52, No. 2 (May 1972), p. 371.
52. Young, R. "Institutional Credit in the Rural Sector: An Exploratory Analysis of Demand and Supply," Quarterly Review of Agricultural Economics, Vol. 26, No. 4 (Oct. 1973), pp. 228-38.

U.S. Department  
of Agriculture

1. Aigner, F. D., and others. Agricultural and Credit Outlook 1978. U.S. Dept. Agr., Farm Credit Admin., Dec. 1977.
2. \_\_\_\_\_. Agricultural and Credit Outlook 1976. U.S. Dept. Agr., Farm Credit Admin., Dec. 1975.
3. Aigner, F. D. Characteristics of Federal Land Bank Loans 1972. SB-5. U.S. Dept. Agr., Farm Credit Admin., Sept. 1973.
4. Fox, R. L., and L. L. Monroe. A Livestock Credit Cooperative for the Southeast. SR-142. U.S. Dept. Agr., Farmer Coop. Serv., Oct. 1974.
5. \_\_\_\_\_. Need for Expanding Livestock Credit in the Southeast. RR-28. U.S. Dept. Agr., Farmer Coop. Serv., Mar. 1975.
6. Harrison, V. L. Financial Management Research in Farming in the U.S.: An Annotated Bibliography of Recent Publications and Current Work. MP-1222. U.S. Dept. Agr., Econ. Res. Serv., Nov. 1971.

7. Hyde, F. M. The PCA Cooperatives Patron Credit Plan. GR-135. U.S. Dept. Agr., Farmer Coop. Serv., July 1966.
8. Mitchem, N. P., and D. Hazelwood. Agricultural Finance Statistics. AFS-2. U.S. Dept. Agr., Econ. Res. Serv., June 1974.
9. U.S. Department of Agriculture, Economic Research Service. Revision of the USDA's Non-Real Estate Farm Debt, 1962-75. ERS-647. Jan. 1977.
10. \_\_\_\_\_, Economic Research Service. Agricultural Finance Outlook. AFO-11. Published annually.
11. Warren, F. G., and N. P. Mitchem. Farm Mortgage Characteristics Jan.-June 1971 and Historic Data 1961-69. ERS-527. U.S. Dept. Agr., Econ. Res. Serv., Aug. 1973.
12. \_\_\_\_\_, and V. E. Eitel. Characteristics of Farm Mortgage Loans by Type of Farming Area. AIB-356. U.S. Dept. Agr., Econ. Res. Serv., Dec. 1971.

#### Experiment Stations

1. Allen, B. T., J. R. Brake, and W. A. Hayenga. Some Effects of Rural Bank Mergers on Financial Services Available to Michigan Residents. Mich. State Univ., Agr. Exp. Sta., Res. Rep. 243, May 1974.
2. Baker, C. B., and G. D. Irwin. Effects of Borrowing from Commercial Lenders on Farm Organization With Particular Reference to Fertilizers, Buildings, Machinery, Livestock, and Operating Expenses. Ill. Agr. Exp. Sta., Res. Bull. 717, May 1961.
3. Bell, S. C., and J. C. Gamble. An Analysis of Agricultural Credit in the Wiregrass Area of Alabama. Auburn Univ., Agr. Exp. Sta., Bull. 398, Jan. 1970.
4. \_\_\_\_\_, and R. J. Braddock. Agricultural Lending in Selected Agriculturally Oriented Alabama Commercial Banks. Ala. Agr. Exp. Sta., Bull. 500, 1977.
5. Bivens, G. E., and others. Use of Credit by Farm Families in Southern Iowa and Northern Missouri. Iowa Agr. & Home Econ. Exp. Sta., Spec. Rep. 35, Dec. 1963.
6. Bosluick, D. J. Esmay, and G. Rodenwald. Agricultural Production Credit in Montana. Mont. Agr. Exp. Sta., Circ. 233, Apr. 1961.

7. Carson, E. E. Farmer Use of Merchant Credit in Indiana. Ind. Agr. Exp. Sta., Mimeo EO 143, Feb. 1957.
8. Champney, W. O., and K. L. Freeman. Projections of Capital and Credit Needs on Northern Nevada Range Livestock Operations to 1980. Nev. Agr. Exp. Sta., Bull. 30, Sept. 1972.
9. Conley, M. B., and R. V. Whither. Production Credit Use in Idaho Agriculture. Idaho Agr. Exp. Sta., Bull. 462, May 1966.
10. Davidson, J. R., and T. W. Wetzel. Merchant Credit In Montana Agriculture. Mont. Agr. Exp. Sta., Circ. 243, Apr. 1963.
11. Dickens, D. Factors Related to the Use of Credit Resources by Farm Families. Miss. Agr. Exp. Sta., Bull. 658, Mar. 1963.
12. Doeksen, G. A., and D. F. Schreiner. An Analysis of Capital Structure by Private Sectors in Oklahoma. Okla. Agr. Exp. Sta., Bull. 694, July 1971.
13. Epperson, J. E., and S. C. Bell. Getting Established in Farming With Special Reference to Credit. Auburn Univ., Agr. Exp. Sta., Apr. 1970.
14. Fisher, G., C. E. Rousch, and M. D. Boehlje. A Management Game for Non-Metropolitan Commercial Banks. Okla. Agr. Exp. Sta., Res. Rep. P703, Oct. 1974.
15. Heisterberg, D. L., and J. B. Kliebenstein. Farm Lending Practices and Services Provided for Missouri Farmers by Selected Credit Sources. Mo. Agr. Exp. Sta., Spec. Rep. 204, Oct. 1977.
16. Hesser, L. F. The Market for Farm Mortgage Credit-An Econometric Study. Ind. Agr. Exp. Sta., Res. Bull. 770, Dec. 1963.
17. Hopkin, J. A., and T. L. Frey. Problems Faced by Commercial Banks of Illinois in Meeting the Financing Requirements of a Dynamic Agriculture. Ill. Univ., Dept. Agr. Econ., Exp. Sta., AERR 99, Apr. 1969.
18. Johnson, C. M. Farm Credit, Uses and Sources for South Dakota Farmers. S. Dak. Agr. Exp. Sta., Agr. Econ., Pam 72, July 1956.



19. Johnson, R. B. Agricultural Loan Evaluation with Discriminant Analysis. Mo. Agr. Exp. Sta., Res. Bull. 997, Aug. 1972.
20. Krause, K. R., J. C. Snyder, and J. H. Atkinson. Cost Structure of Insurance Companies in Illinois and Indiana. Ind. Agr. Exp. Sta., Res. Bull. 804, Dec. 1965.
21. \_\_\_\_\_. Specialized Illinois and Indiana Farm Mutual Companies in a Changing Competitive Environment. Ind. Agr. Exp. Sta., Bull. 771, Dec. 1969.
22. Ladue, E. L. Farm Loans Under Price Uncertainty. Cornell Agr. Exp. Sta., St. Pap. 76-6, Jan. 1976.
23. Lance, B. P., and J. C. Thomson. An Economic Analysis of Farmer Mutual Fire Insurance Companies of Georgia, 1958. Ga. Agr. Exp. Sta., Bull. (n.s.) 88, Dec. 1961.
24. Nelson, A. G., and G. S. Willett, Agricultural Credit in Arizona Agriculture, Current Status and Outlook. Ariz. Agr. Exp. Sta., Bull. A-74, Apr. 1973.
25. Otto, M. L. Farmers' Use and Knowledge of Sources of Credit in Marshall and Saline Counties in Kansas. Kans. Agr. Exp. Sta., Agr. Econ., Rep. 57, 1954.
26. Pine, W. H. The Financial Situation of Kansas Farmers. Kans. Agr. Exp. Sta., Bull. 614, Apr. 1978.
27. Rousch, C., and M. Boehlje. Trade Credit and Receivables Management in the Oklahoma Fertilizer Industry. Okla. State Univ., Agr. Exp. Sta., Bull. 709, June 1973.
28. Sinclair, R. O. Insurance Purchases of Vermont Farmers. Vt. Agr. Exp. Sta., Bull. 615, Dec. 1959.
29. Smith, C. R. Farmers' Mutual Fire Insurance Companies in South Carolina. S.C. Agr. Exp. Sta., Bull. 385, June 1950.
30. Snell, J. G., and R. Barnett. Attitude of Tennessee Farmers Toward Credit. Tenn. Agr. Exp. Sta., Bull. 497, June 1972.
31. Taylor, F. R., and H. Huber. Merchant-Dealer Credit in North Dakota Part 1, Farmer Use and Importance. N. Dak. Agr. Exp. Sta., AER 62, Apr. 1969.



32. \_\_\_\_\_, and M. E. Bredakl. Merchant-Dealer Credit in North Dakota Part 2: Merchant-Dealer Problems and Practices. N. Dak. Agr. Exp. Sta., AER 63, Apr. 1969.
33. Trotter, C. E., and L. Chubbuck. Customer Credit in the Pennsylvania Feed Industry: Practices, Costs, and Benefits. Pa. State Univ., Agr. Exp. Sta., Bull. 786, Feb. 1973.

Ph.D. Dissertations

1. Ahmad, M. I. "An Economic Analysis of Rate Sensitivity to Loan Structure Component Variations Within the U.S. Banks for Cooperatives System Using a Multiperiod Linear Programming Approach." Ph.D. Dissertation. Wash. State Univ., 1979.
2. Bauman, H. D. "Farm Mortgage Credit: An Analysis of Factors Influencing Its Supply and Demand." Ph.D. Dissertation. Ohio State Univ., 1968.
3. Benjamin, G. L. "An Analysis of the Structure and Functions of Correspondant Banking: Implications for Financing Agriculture in Illinois." Ph.D. Dissertation. Univ. Ill., 1973.
4. Boonkiskulchok, K. "Economic Analysis of Correspondant Banking As A Source of Fund to Texas Agriculture." Ph.D. Dissertation. Tex. A & M Univ., 1976.
5. Bruckner, Eric. "Structural Changes in North Carolina's Banking Industry, 1950-1963." Ph.D. Dissertation. Duke Univ., 1966.
6. Call, Ivan Taylor. "Banking Structure in Utah: 1945-1965." Ph.D. Dissertation. Indiana Univ., Graduate School of Business, 1969.
7. Carlow, Leslie G. "Capital in Nebraska Agriculture: Its Formation, Distribution and Financing." Ph.D. Dissertation. Univ. Neb., 1975.
8. Claggett, E. T., Jr. "Scale Economies in a Cooperative Financial System: Production Credit Associations." Ph.D. Dissertation. Univ. Houston, 1979.
9. Dahl, Reynold Paul. "An Economic Analysis of the Agricultural Production Lending Activities of Minnesota Country Banks." Ph.D. Dissertation. Univ. Minn., 1954.

10. Darrow, Edward Eugene. "The Structure of the Agricultural Long-Term Credit Market in Ohio." Ph.D. Dissertation. Ohio State Univ., 1965.
11. Dunn, D. J. "Lending Risks of the Federal Land Banks: An Application of the Loan Performance Simulator." Ph.D. Dissertation. Univ. Ill., 1978.
12. Edwards, Franklin Richard. "Competition in Commercial Banking: A Statistical Study." Ph.D. Dissertation. Harvard Univ., 1964.
13. Emery, John Thomas. "Risk, Return and the Competitive Structure of Commercial Banking." Ph.D. Dissertation. Univ. Wash., 1969.
14. Frey, T. L. "Optimal Asset and Liability Decisions for a Rural Bank: An Application of Multiperiod Linear Programming." Ph.D. Dissertation. Univ. Ill., 1970.
15. Gutowsky, Albert Ronald. "The Oregon Commercial Banking Industry: Its Structure, Competition and Performance." Ph.D. Dissertation. Univ. Oreg., 1965.
16. Hacket, John Thomas. "Concentration in Banking in Ohio During the Postwar Period." Ph.D. Dissertation. Ohio State Univ., 1962.
17. Hayenga, W. A., "The Effects of Bank Mergers on Financial Services Available to Rural Michigan Residents." Ph.D. Dissertation. Mich. State Univ., 1973.
18. Herder, R. J. "An Analysis of Agricultural Credit Lending by Commercial Banks in the Ninth Federal Reserve District." Ph.D. Dissertation. Univ. Minn., 1970.
19. Hesser, Leon Francis. "The Market for Farm Mortgage Credit: An Econometric Study." Ph.D. Dissertation. Purdue Univ., 1963.
20. Horvitz, Paul Michael. "Concentration and Competition in New England Banking." Ph.D. Dissertation. Mass. Inst. Tech., 1958.
21. Hyman, David Neil. "A Behavioral Model for Commercial Banking." Ph.D. Dissertation. Princeton Univ., 1969.
22. Islam, A. K. M. S. "Operating Loan Policy of Commercial Lending Agencies and Optimum Resource Allocation in an Irrigated Rise Area of Texas." Ph.D. Dissertation. Tex. A & M Univ., 1970.

23. Johnson, R. B. "Agricultural Loan Evaluation With Discriminant Analysis." Ph.D. Dissertation. Univ. Mo., 1970.
24. Johnstone, Robert Lawrence. "An Economic Analysis of the Agricultural Lending Activities of Commercial Banks in Selected Areas of Illinois." Ph.D. Dissertation. Univ. Ill., 1961.
25. Kohl, D. M. "Merchant and Dealer Credit in New York State." Ph.D. Dissertation. Cornell Univ., 1978.
26. Krause, Kenneth Raymond. "An Economic Analysis of the Operational Efficiency of Farm Mutual Insurance Companies." Ph.D. Dissertation. Purdue Univ., 1963.
27. Krogh, Harold Christian. "The Structure and Role of the Local Insurance Agency in Iowa." Ph.D. Dissertation. Iowa State Univ., 1953.
28. Lacy, A. W. "The Determinants of Trade Credit." Ph.D. Dissertation. Iowa State Univ., 1971.
29. Landry, C. W. "Arkansas Agricultural Credit Institutions and Agricultural Credit Markets Under Conditions of Continued Economic Growth." Ph.D. Dissertation. Univ. Ark., 1972.
30. Levenson, Albert Munay. "Differentials in Interest Rates and Cost of Commercial Bank Lending." Ph.D. Dissertation. Columbia Univ., 1960.
31. Lins, David A. "An Analysis of Sources and Uses of Funds in the Farm Sector of the United States." Ph.D. Dissertation. Univ. Ill., Oct. 1972.
32. McCall, Alan Stewart. "A Statistical Study of Market Structure and Performance: Small and Medium Sized Commercial Banks." Ph.D. Dissertation. Univ. Ky., 1969.
33. McManus, B. R. "Credit Reserves for Midwestern Farmers." Ph.D. Dissertation. Purdue Univ., 1971.
34. Manuel, Milton Lloyd. "Historical Development and Evaluation of the Farm Management Service Associations in the United States." Ph.D. Dissertation. Univ. Minn., 1952.
35. Meier, H. A. "Agricultural Lending Attitudes, Practices, and Activities of Ohio Commercial Bankers." Ph.D. Dissertation. Ohio State Univ., 1972.



36. Meyer, Paul Anthony. "Regional Interest Rate Differentials and the Structure of the Banking Industry." Ph.D. Dissertation. Stanford Univ., 1966.
37. Neuman, Duane Frederick. "Effects on Non-Real Estate Loan Policy of Primary Lenders on the Organization of Farms in East Central Illinois." Ph.D. Dissertation. Univ. Ill., 1963.
38. Patterson, Kenneth Denton. "Competition Between Commercial Banks and a Production Credit Association: A Case Study." Ph.D. Dissertation. Univ. Neb., 1961.
39. Pike, John Robert. "The Structure and Adequacy of Wisconsin Commercial Banking." Ph.D. Dissertation. Univ. Wis., 1964.
40. Samman, M. A. "Analysis of Factors Influencing Loan Losses of Production Credit Associations." Ph.D. Dissertation. Univ. Mo., 1974.
41. Sinclair, Solomon. "The Role of Subsidies in Farm-Mortgage Credit." Ph.D. Dissertation. Univ. Minn., 1953.
42. Sweeney, Robert Edwin. "Bank Structure Competition and Interest Rates on Farm Loans." Ph.D. Dissertation. Ga. State Univ., 1969.
43. Upadhyay, K. S. "An Analysis of the Structure of the Farm Mortgage Credit Market in Kansas." Ph.D. Dissertation. Kans. State Univ., 1971.
44. Wallace, Richard Strong. "Banking Structure and Bank Performance: A Case Study of Three Small Market Areas." Ph.D. Dissertation. Univ. Va., 1965.

#### M.S. Theses

1. Adams, B. M. "Agricultural Financing in Texas: Problems Associated With Statutory Lending Limits of Commercial Banks." M.S. Thesis. Tex. A & M Univ., 1975.
2. Bell, T. "An Appraisal of Agricultural Credit in the Brown Loan Area of Mississippi." M.S. Thesis. Miss. State Univ., 1967.
3. Bourn, Harry Joseph. "Farm Service and Farm Departments in Illinois Banks." M.S. Thesis. Univ. Ill., 1963.
4. Brandy, O. C. "Debt Servicing Capacity to Farmers in the Blackland Area of Texas." M.S. Thesis. Tex. A & M Univ., 1977.

5. Bredahl, Maury. "North Dakota Merchant-Dealer Agricultural Credit." M.S. Thesis. N. Dak. State Univ., 1968.
6. Carson, Edward Elmer. "Analysis of Farmers' Use of Merchant Credit in Selected Indiana Counties." M.S. Thesis. Purdue Univ., 1956.
7. Coffman, George. "Factors Affecting Farm People's Attitude and Use of Credit." M.S. Thesis. Univ. Mo., 1959.
8. Collins, M. A. "An Analysis of Dairy Farm Credit Files of A Rural Bank in Western New York." M.S. Thesis. Cornell Univ., 1975.
9. Colony, Marion Harold. "Factors Affecting the Demand for Operating Credit in Iowa Agriculture." M.S. Thesis. Iowa State Univ., 1958.
10. Coulter, George H. "Selected Phases of Production Credit in North Dakota-Farmers' Uses and Attitudes, Banks' Practices and Opinions." M.S. Thesis. N. Dak. State Univ., 1959.
11. Dominy, W. D. "An Economic Analysis of Selected Production Credit Associations in Georgia." M.S. Thesis. Univ. Ga., 1967.
12. Donaldson, T. R. "Factors Affecting Individual Farm Operators Level and Type of Farm Debt." M.S. Thesis. Univ. Ill., 1976.
13. Falls, S. D. "Farm Firm Debt Capacity: An Emperical Study of Northeastern Ohio Dairy Farms." M.S. Thesis. Ohio State Univ., 1972.
14. Fisher, G. "The Development of A Management Game for Oklahoma Rural Banks." M.S. Thesis. Okla. State Univ., 1973.
15. Fulconis, R. P. "Economic Relevance of the Financial Criteria Applied by the Southeastern New England Cooperate Farm Credit Service." M.S. Thesis. Univ. Conn., 1970.
16. Garmon, W. M. "Description and Analysis of Lending Policies and Practices of National Farm Loan Associations in Georgia, North Carolina, and South Carolina." M.S. Thesis. Clemson Univ., 1961.

17. Gravens, James J., Jr. "An Appraisal of Agricultural Credit From Commercial Banks in South Carolina, 1967." M.S. Thesis. Clemson Univ., 1968.
18. Hardy, W. E., Jr. "The Effect of Credit Policies on Farm Firm Growth." M.S. Thesis. Va. Poly. Inst., 1970.
19. Harris, Gene. "The Effect of Knowledge of Lending Policies and Farm Credit Needs on Capital Rationing." M.S. Thesis. Univ. Ky., 1965.
20. Helgeson, Delner L. "Lending Policies and Practices of Selected North Dakota Lending Agencies." M.S. Thesis. N. Dak. State Univ., 1960.
21. Hesser, L. F. "Analysis of Factors Associated With Farmers' Use and Management of Credit." M.S. Thesis. Purdue Univ., 1960.
22. Hopkins, Robert John. "Knowledge and Attitude Toward Use of Credit by Farmers in Middle and East Tennessee." M.S. Thesis. Univ. Tenn., 1970.
23. Huber, Hilmer. "The Importance of Merchant and Dealer Credit in Financing Farm Production Expenses." M.S. Thesis. N. Dak. State Univ., 1967.
24. Hutson, A. L. "Economic Analysis of Commercial Bank-Farm Credit System Coordination." M.S. Thesis. Okla. State Univ., 1973.
25. Ites, D. L. "Use of Farm Capital in Iowa." M.S. Thesis. Iowa State Univ., 1972.
26. Jones, Bruce L. "Factors Affecting the Borrowing Potential of Farmers In East-Central Illinois." M.S. Thesis. Univ. Ill., 1978.
27. Kim, Joongsik. "An Analysis of Agricultural Lending Practices of Selected Financial Institutions in Alabama." M.S. Thesis. Auburn Univ., 1969.
28. Lance, Boyce B., Jr. "An Analysis of Some Economic Factors Affecting Operation and Premiums of Farmers' Mutual Fire Insurance Companies in Georgia." M.S. Thesis. Univ. Ga., 1958.



29. Lazarus, S. S. "An Analysis of Commercial Bank Lending to Farmers in Pennsylvania." M.S. Thesis. Pa. State Univ., 1978.
30. Lee, Warren Ford. "An Analysis of the Nonreal Estate Agricultural Credit Market." M.S. Thesis. Univ. Ill., 1967.
31. McKissick, J. C. "An Analysis of the Cost of Capital to Farm Firms in Georgia." M.S. Thesis. Univ. Ga., 1978.
32. Marshall, Duane L. "Farm Credit Structure in Relation to Capital Use in a Selected Area of the Columbia Basin, Washington." M.S. Thesis. Wash. State Univ., 1965.
33. Martin, Robert J. "An Appraisal of Agricultural Credit in the Brown Loan Area of Mississippi." M.S. Thesis. Miss. State Univ., 1966.
34. Podoleck, V. B. "Loan/Deposit Links at Rural Texas Banks." M.S. Thesis. Tex. A & M Univ., 1977.
35. Robison, L. J. "A Comparison of Interest Rate Policies of the St. Louis Federal Land Bank." M.S. Thesis. Univ. Ill., 1971.
36. Romans, John Thomas. "Knowledge and Attitudes of Tennessee Farmers Concerning Credit Practices and Some Effects on Credit Management and Credit Cost." M.S. Thesis. Univ. Tenn., 1957.
37. Scherr, E. A. "Farmer Home Administration Agricultural Borrower and Loan Characteristics, 1968." M.S. Thesis. N. Dak. State Univ., Aug. 1970.
38. Schmedt, T. F. "Future Capital and Credit Needs for Oklahoma Farms." M.S. Thesis. Okla. State Univ., 1973.
39. Tubb, Doyl Wayne. "An Appraisal of Farm Credit in the Delta Area of Mississippi." M.S. Thesis. Miss. State Univ., 1966.
40. Van Hooter, G. "The Relationship of Agricultural Credit and Other Selected Factors to Growth and Capital Accumulation in the Family Farm Firm." M.S. Thesis. Purdue Univ., 1970.

41. Weisbeck, James Roger. "An Analysis of the Cooperative Assessment Fire Insurance Companies in New York State, 1955-59." M.S. Thesis. Cornell Univ., 1961.
42. Witzel, Theodore W. "Farmer Use of Merchant Credit in the Mid-Yellowstone Valley of Montana." M.S. Thesis. Mont. State Univ., 1961.
43. Wyngarden, A. N. "Financing Beginning Farmers: Lenders Views." M.S. Thesis. N. Dak. State Univ., 1979.
44. Zetocha, D. F. "Savings and Lending Policies of Commercial Banks and Savings and Loan Associations in North Dakota." M.S. Thesis. N. Dak. State Univ., 1977.

Ongoing Current  
Research Infor-  
mation System  
(CRIS) Projects

1. Baker, C. B. "Financing Farms, Markets and Rural Communities," Univ. Ill., Urbana, Ill. Period: 3-9-76 to 9-30-80. Objectives: Estimates the effects of financial strategies on the organization, income, viability, and growth of Illinois farms; evaluates agricultural finance markets and the effects of alternatives in organization, operation, and regulation of farm-related financial intermediaries; associates the distribution of risks with the distribution of rewards in the food production-distribution system and the related financial system; and investigates the relationships between area growth and area financial markets with alternatives in financing area growth.
2. Hardy, W. E., Jr. "Development of Models for Evaluation of Credit Worthiness of Agricultural Borrowers." Auburn Univ., Auburn, Ala. Period: 10-1-78 to 9-30-81. Objectives: Describes and analyzes procedures used to evaluate credit worthiness of agricultural borrowers and their basic characteristics; and develops an objective usable loan classification procedure to evaluate risk associated with potential and existing agricultural loans.
3. Kizer, L. G. "A Study and Analysis of the Financial Structure of Mississippi Agriculture." Miss. State Univ., Mississippi State, Miss. Period: 10-10-76 to 6-30-80. Objectives: Determines the lending policies and practices of agricultural lending agencies providing credit to Mississippi farmers; studies the impact of capital requirements and cost of marginal investments on the financial structure of Mississippi farms; analyzes the intra-farm value of capital for

marginal investment alternatives or requirements; and explores alternative methods of financing the future expected credit needs of agriculture.

4. Van Blokland, P. J. "Lending and Borrowing Funds for Florida's Agriculture." Univ. Fla., Gainesville, Fla. Period: 12-4-78 to 12-31-83. Objectives: Finds what lending criteria and client requirements are demanded by Florida banks for short-term agricultural loans, determines how agricultural financial lenders in Florida cope with widely varying prices for some agricultural enterprises; and records the national and statewide trends in the different agricultural lending institutions, and how these trends will affect the State's agriculture to determine how the futures market can be used as a lending and borrowing tool for agricultural financial institutions as well as farm businesses in Florida.

Completed Current  
Research Infor-  
mation System  
(CRIS) Projects

1. Bell, S. C. "Changing Role of Selected Credit Agencies." Auburn Univ., Auburn, Ala. Period: 7-1-75 to 9-30-79. Objectives: Determined and analyzed attitudes and changing practices of commercial bankers relative to the use of agricultural specialists in meeting increased credit demands of farmers; and determined and evaluated the changing role of farm supply dealers in the area of agricultural credit.
2. Boehlje, M. "Capital Market For Farm Firms: Adequacy, Institutional Changes and Firm Financial Management." Iowa State Univ., Ames, Iowa. Period: 8-19-74 to 7-1-79. Objectives: Analyzed the requirements and availability of aggregate and per farm debt, equity, and total capital for the agricultural production sector of Iowa and the Midwest; evaluated the impact of institutional changes and developments in the agricultural capital market on the farm firm, rural financial intermediaries, and aggregate supply and demand relationships; and assessed the capital needs of limited resource (small, part-time, and beginning) farmers and potential of current financial institutions to meet their needs.
3. Gessaman, P. "Acquisition and Use of External Capital in Rural Nebraska." Univ. Neb., Lincoln, Neb. Period: 4-5-73 to 12-31-77. Objectives: Determined the flow of funds through which Nebraska rural borrowers secured their debt and equity capital; identified institutional constraints in the lending process and evaluated their



impact on rural credit users, as well as evaluating possible solutions to constraints identified, methods of financial analysis, and financial management techniques for farm firms.

4. Hillman, J. S. "Financial Problems Relating to Development of Agricultural Production and Credit Sectors." Univ. Ariz., Tucson, Ariz. Period: 7-1-74 to 6-30-77. Objectives: Identified the policies, practices, and problems associated with the lending and use of agricultural credit as viewed by Arizona bankers and agricultural producers; and investigated alternative strategies for transferring farm/ranch assets from one generation or owner to the next.
5. Hoque, A. "An Analysis of Alternatives for Financing Low-Equity Farms." Southern Univ., Baton Rouge, La. Period: 2-19-74 to 2-18-79. Objectives: Determined the amount of credit that would be necessary to improve and/or maintain the economic position of the low-equity farm at or above a viable income level and established criteria by which credit would be provided; identified those low-equity farms that are viable in the sense that they are producing viable incomes; estimated the credit requirements for various labor-intensive enterprises that are adaptable to low-equity farms; evaluated the lending and supervisory credit policies of private and governmental lending institutions with respect to the low-equity farms; and determined methods and/or procedures by which low-equity farms may be financed.
6. Ladue, E. L. "Capital Management and Finance of the Agricultural Firm." Cornell Univ., Ithaca, N.Y. Period: 10-28-71 to 9-30-79. Objectives: Determined the factors influencing adjustments of agricultural credit institutions to a changing agriculture and evaluated selected institutional arrangements, determined the economic feasibility of alternatives to asset ownership; developed and evaluated management measurement aid loan evaluation techniques; developed and evaluated capital management techniques, as well as alternative growth strategies and isolated factors influencing growth.
7. Myrick, D. H. "Financial Management in Montana Agriculture." Mont. State Univ., Bozeman, Mont. Period: 1-13-77 to 9-30-79. Objectives: Promotes more efficient financial management on Montana farms and ranches, and assists Montana farmers, ranchers; and

their credit institutions in avoiding periodic financial disaster due to production failures, price declines, and combinations thereof.

8. Taylor, F. R. "Credit Problems of North Dakota Agriculture." N. Dak. State Univ., Fargo, N. Dak. Period: 10-11-65 to 9-30-79. Objectives: Determined needs and supply of farm credit; analyzed methods of financing farm adjustments; and evaluated institutional lending policies and practices.
9. Wise, J. O. "Requirements for and Alternative Method of Acquiring Capital." Univ. Ga., Athens, Ga. Period: 7-1-72 to 9-30-79. Objectives: Determined capital requirements and capital use for viable Georgia farms; described major alternatives for acquiring capital with respect to emerging needs and farmer goals; and suggests ways of improving farm financial management and flow of capital into agriculture.

#### LABOR

##### Books

1. Bishop, C. E. Farm Labor in the United States. New York, N.Y.: Columbia Univ. Press, 1967.
2. Hoover, N. K. Handbook of Agricultural Occupations. Danville, Ill.: The Interstate Printers & Pub. Inc., 1969.
3. Hopkins, J. A. Changing Technology and Employment in Agriculture. New York, N.Y.: DaCapo Press Inc., 1973.
4. Padfield, H., and W. E. Martin. Farmers, Workers, and Machines: Technological and Social Change in Farm Industries of Arizona. Tucson, Ariz.: Univ. Ariz. Press, 1965.
5. Marshall, R. Rural Workers in Rural Labor Markets. Salt Lake City, Utah: Olympus Pub. Co., 1974.

##### Journals

1. "Agricultural Wages, 1943 to 1957," International Labour Review, Vol. 80, No. 5 (Nov. 1959), pp. 430-41.
2. Auer, L. "Labor Productivity In Agriculture, A Canada-US Comparison," Canadian Journal of Agricultural Economics, Vol. 18, No. 3 (Nov. 1970), pp. 43-55.

3. Barton, G. T. "Manpower Requirements of Agriculture During the Next Ten Years," Journal of Farm Economics, Vol. 33, No. 4 (Nov. 1951), pp. 711-21.
4. Baum, E. L., and Heady, E. O. "Some Effects of Selected Policy Programs on Agricultural Labor Mobility in the South," Southern Journal of Agricultural Economics, Vol. 25, No. 3 (Jan. 1959), pp. 327-37.
5. Bishop, C. E. "Underemployment of Labor in Southeastern Agriculture," Journal of Farm Economics, Vol. 36, No. 2 (May 1954), pp. 258-72.
6. Bowles, G. K. "The Hired Farm Work Force," Agricultural Policy Review, Vol. 6, No. 3 (July-Sept. 1966), pp. 6-7.
7. Bryant, W. K. "Demand and Supply of Agricultural Labor in a Period of Social Change," Journal of Farm Economics, Vol. 46, No. 5. (Dec. 1964), pp. 1246-52.
8. Burford, R. L. "The Federal Cotton Programs and Farm Labor Force Adjustments," Southern Economic Journal, Vol. 33, No. 2 (Oct. 1966), pp. 223-36.
9. Chiswick, B. R. "The Effect of Unemployment Compensation on a Seasonal Industry: Agriculture," Journal of Political Economy, Vol. 84, No. 3 (June 1976), pp. 591-602.
10. Clawson, M., and R. B. Held. "Demand for Rural Resources in the Context of Long Range National Needs," Journal of Farm Economics, Vol. 45, No. 5 (Dec. 1963), pp. 1027-37.
11. Coffey, J. D. "National Labor Relation Legislation: Possible Impact on American Agriculture," American Journal of Agricultural Economics, Vol. 51, No. 5 (Dec. 1969), pp. 1065-74.
12. Daly, D. J. "Aspects of the Decline in Employment in Canadian Agriculture," Canadian Journal of Agricultural Economics, Vol. 3, No. 2 (1955), pp. 19-31.
13. Dovring, F. "Labor Force Composition and Economic Structure of the Agricultural Sector," Illinois Agricultural Economics, Vol. 4, No. 3 (Dec. 1964), pp. 29-38.
14. Ducan, O. D., and J. D. Cowhig. "Social Backgrounds and Occupational Commitment of Male Wage Workers in Agriculture," Agricultural Economics Research, Vol. 18, No. 4 (Oct. 1966), pp. 129-35.



15. Ducoff, L. J., and J. R. Motherol. "The Manpower Situation in Southern Agriculture," Journal of Farm Economics, Vol. 36, No. 1 (Feb. 1954), pp. 52-65.
16. Elterich, J., and R. Bieker. "Cost of Unemployment Insurance for Farmworkers in Selected States," Agricultural Economics Research, Vol. 27, No. 3-4 (July-Oct. 1975), pp. 85-92.
17. Fisher, L. H. "The Harvest Labor Market in California," Quarterly Journal of Economics, Vol. 65, No. 4 (Nov. 1951), pp. 463-91.
18. Freyssinet, J., and A. Mounier. "Measuring the Incomes of Agricultural Workers," International Labour Review, Vol. 110, No. 3 (Sept. 1974), pp. 251-66.
19. Fuller, V., and C. L. Beale. "Impact of Socioeconomic Factors on Farm Labor Supply," Journal of Farm Economics, Vol. 49, No. 5 (Dec. 1967), pp. 1237-44.
20. Funk, T. F., and W. A. Okyere. "Income Determinants of Ontario Dairy Farm Employees," Canadian Journal of Agricultural Economics, Vol. 25, No. 1 (Feb. 1977), pp. 80-3.
21. Gallardo, L. L. "Economics of the Demand for Harvest Labor by the Individual Farm Enterprise," Western Economic Journal, Vol. 2, No. 3 (Summer 1964), pp. 183-94.
22. Gallasch, H. F., Jr. "Minimum Wages and the Farm Labor Market," Southern Economic Journal, Vol. 41, No. 3 (Jan. 1975), pp. 480-91.
23. Gallaway, L. E. "Mobility of Hired Agricultural Labor: 1957-1960," Journal of Farm Economics, Vol. 49, No. 1 (Feb. 1967), pp. 32-52.
24. Gardner, B. "Minimum Wages and the Farm Labor Market," American Journal of Agricultural Economics, Vol. 54, No. 3 (Aug. 1972), pp. 473-76.
25. Grove, E. W. "The Farm Labor Income Number Game," Journal of Farm Economics, Vol. 47, No. 4 (Nov. 1965) pp. 1022-24.
26. \_\_\_\_\_. "Farm Labor and the Structural Analysis of Agriculture," Journal of Farm Economics, Vol. 49, No. 5 (Dec. 1967), pp. 1245-56.
27. Haase, G. "The Economy of Labour on Western Canada Farms," Canadian Journal of Agricultural Economics, Vol. 2, No. 2 (Fall 1953), pp. 8-14.

28. Hecht, R. W. "Migratory Farm Labor," Agricultural Policy Review, Vol. 6, No. 3 (July-Sept. 1966), pp. 10-11.
29. Herr, W. M. "Labor Transfer and Farm Adjustment," Journal of Farm Economics, Vol. 41, No. 1 (Feb. 1959), pp. 118-24.
30. Holt, J. S. "Impact of the Industrialization of the Hired Farm Work Force Upon the Agricultural Economy," American Journal of Agricultural Economics, Vol. 52, No. 5 (Dec. 1970), pp. 780-86.
31. Huffman, W. E. "The Productive Value of Human Time in U.S. Agriculture," American Journal of Agricultural Economics, Vol. 58, No. 4 (Nov. 1976), pp. 745-49.
32. \_\_\_\_\_. "The Value of the Productive Time of Farm Wives: Iowa, North Carolina, and Oklahoma," American Journal of Agricultural Economics, Vol. 58, No. 5 (Dec. 1976), pp. 836-41.
33. \_\_\_\_\_. "Interactions Between Farm and Non-Farm Labor Markets," American Journal of Agricultural Economics, Vol. 59, No. 5 (Dec. 1977), pp. 1054-61.
34. Johnson, D. G. "Functioning of the Labor Market," Journal of Farm Economics, Vol. 33, No. 1 (Feb. 1951), pp. 75-89.
35. \_\_\_\_\_. "Output and Income Effects of Reducing the Farm Labor Force," Journal of Farm Economics, Vol. 42, No. 4 (Nov. 1960), pp. 779-90.
36. \_\_\_\_\_, and M. C. Nottenburg. "A Critical Analysis of Farm Employment Estimates," Journal of the American Statistical Association, Vol. 46, No. 2 (June 1951), pp. 191-205.
37. Jones, B. F. "The Impact of Government Subsidized Farm-Operating Loans on Family Labor Employment in Agriculture," Journal of Farm Economics, Vol. 48, No. 5 (Dec. 1966), pp. 1216-21.
38. Knebel, S. M. "Current Developments In Farm Labor Legislation," Journal of Farm Economics, Vol. 48, No. 5 (Dec. 1966), pp. 1131-36.
39. \_\_\_\_\_. "Impact of the Industrialization of the Hired Farm Work Force Upon the Agricultural Economy: Discussion," American Journal of Agricultural Economics, Vol. 52, No. 5. (Dec. 1970), p. 787.

40. Knutson, R. D. "Organizational and Institutional Changes Needed in an Industrialized Agriculture: Bargaining, Unionization, Unemployment Insurance: Discussion," American Journal of Agricultural Economics, Vol. 52, No. 5 (Dec. 1970), p. 790.
41. Ladd, G. W. "A Model of an Agricultural Labor Union." American Journal of Agricultural Economics, Vol. 56, No. 5 (Dec. 1974), pp. 1066-75.
42. Langvatn, H. N. "An Approach to the Effect of Size and Combination of Enterprises on Farm Labor Consumption," Journal of Farm Economics, Vol. 42, No. 1 (Feb. 1960), pp. 78-89.
43. Levine, L. "Economic Security for Agricultural Labor," Journal of Farm Economics, Vol. 44, No. 2 (May 1962), pp. 506-20.
44. Lianos, T. "Interregional Allocation of Labor: A Measure of Economic Efficiency," Annals of Regional Science, Vol. 4, No. 1 (June 1970), pp. 93-103.
45. \_\_\_\_\_. "The Relative Share of Labor in United States Agriculture 1949-68," American Journal of Agricultural Economics, Vol. 53, No. 3 (Aug. 1971), pp. 411-22.
46. \_\_\_\_\_. "The Impact of Minimum Wages Upon the Level and Composition of Agricultural Employment," American Journal of Agricultural Economics, Vol. 54, No. 3 (Aug. 1972), pp. 477-84.
47. Lins, D. A. "Minimum Wage Legislation and Farm Financial Structure," Agricultural Economic Research, Vol. 26, No. 2 (Apr. 1974), pp. 33-40.
48. Mabro, R. "Employment and Wages in Dual Agriculture," Oxford Economic Papers, Vol. 23, No. 3 (Nov. 1971), pp. 401-17.
49. Maitland, S. T., and L. J. Ducoff. "The Farm Labor Force: Recent Trends and Future Prospects," Journal of Farm Economics, Vol. 43, No. 5 (Dec. 1961), pp. 1183-92.
50. Mamer, J. W. "Farm Labor Markets: Discussion," American Journal of Agricultural Economics, Vol. 59, No. 5 (Dec. 1977), pp. 1064-65.
51. Martin, P. "The Study of Rural Labor Markets," Western Journal of Agricultural Economics, Vol. 1, No. 1 (June 1977), pp. 56-63.



52. Martin, P. L., and S. S. Johnson. "Tobacco Technology and Agricultural Labor," American Journal of Agricultural Economics, Vol. 60, No. 3 (Nov. 1978), pp. 655-80.
53. \_\_\_\_\_, and R. Rochin. "Emerging Issues in Agricultural Labor Relations," American Journal of Agricultural Economics, Vol. 59, No. 5 (Dec. 1977), pp. 1045-51.
54. Mehmet, O. "Disguised Unemployment and Agricultural Development," Canadian Journal of Agricultural Economics, Vol. 19, No. 1 (July 1971), pp. 12-19.
55. Nesius, E. J. "Increasing Labor Efficiency on Individual Farm Enterprises," Journal of Farm Economics, Vol. 33, No. 4 (Nov. 1951), pp. 818-26.
56. Nikolitch, R. "Family Labor and Technological Advance in Farming," Journal of Farm Economics, Vol. 44, No. 4 (Nov. 1962), pp. 1061-68.
57. Nilsen, S. R. "Interactions Between Farm and NonFarm Labor Markets: Discussion," American Journal of Agricultural Economics, Vol. 59, No. 5 (Dec. 1977), pp. 1062-63.
58. Popov, V. "Increasing the Productivity of Labor in Agriculture," Problems of Economics, Vol. 19, No. 10 (Feb. 1977), pp. 41-64.
59. Primack, M. L. "Farm Capital Formation as a Use of Farm Labor in the United States, 1850-1910," Journal of Economic History, Vol. 26, No. 3 (Sept. 1966), pp. 348-62.
60. Rees, A. "The Performance of Collective Bargaining," Journal of Farm Economics, Vol. 46, No. 5 (Dec. 1964), pp. 1268-73.
61. Ruttenburg, S. "Economic Indicators for Labor," Journal of Farm Economics, Vol. 43, No. 2 (May 1961), pp. 440-50.
62. Schuh, G. E. "The Long Run Equilibrium in the Hired Farm Labor Force: History and Implications," Journal of Farm Economics, Vol. 43, No. 5 (Dec. 1961) pp. 1338-39.
63. \_\_\_\_\_. "An Econometric Investigation of the Market for Hired Labor in Agriculture," Journal of Farm Economics, Vol. 44, No. 2 (May 1962), pp. 307-21.

64. \_\_\_\_\_, and E. W. Tyrchniewicz. "Behavioral Equations and Equilibrium in the Agricultural Labor Market," Journal of Farm Economics, Vol. 48, No. 5 (Dec. 1966), pp. 1222-26.
65. Scott, J. T., Jr., and P. L. Wahi. "Factors Affecting the Labor Supply Schedule in an Industrializing Rural Area," Illinois Agricultural Economics, Vol. 14, No. 1 (Jan. 1974).
66. Singh, H. P. "Plight of Agricultural Labourers: A Review-II," Economic Affairs, Vol. 16, No. 6 (June 1971), pp. 276-86.
67. Singh, R. D. "Labour Migration and Its Impact on Employment and Income in a Small Farm Economy," International Labor Review, Vol. 116, No. 3 (Nov.-Dec. 1977), pp. 331-41.
68. Smit, B. E. "Employment of Family and Non-Family Labor in Agriculture," Canadian Journal of Agricultural Economics, Vol. 26, No. 1 (Feb. 1978), pp. 35-42.
69. Southern, J. H. "National Agricultural Labor Policy Considerations," Journal of Farm Economics, Vol. 48, No. 5 (Dec. 1966), pp. 1121-30.
70. Taylor, M. C. "A Note on 'Underemployment' in Agriculture," Journal of Farm Economics, Vol. 33, No. 1 (Feb. 1951), pp. 140-43.
71. Teriaeva, A. "Necessary Labor and Its Renumeration in Agriculture," Problems of Economics, Vol. 15, No. 7 (Nov. 1972), pp. 42-64.
72. Tyrchniewicz, E. W., and G. E. Schuh. "Regional Supply of Hired Labor to Agriculture," Journal of Farm Economics, Vol. 48, No. 3 (Aug 1966), pp. 537-56.
73. Wallace, T. D., and D. M. Hoover. "Income Effects of Innovation: The Case of Labor in Agriculture," Journal of Farm Economics, Vol. 48, No. 2 (May 1966), pp. 325-38.
74. Welch, F. "Labor Market Discrimination: An Interpretation of Income Differences in the Rural South," Journal of Political Economy, Vol. 75, No. 3 (June 1967), pp. 225-40.

75. Williams, T. T., and R. B. Glasgon. "Developing Estimates of Economic Underemployment for the Rural Labor Force of Seven Southern States," American Journal of Agricultural Economics, Vol. 50, No. 5 (Dec. 1968), pp. 1432-36.
76. Wirths, W. "The Cost of Human Energy in Agriculture," Journal of Farm Economics, Vol. 39, No. 1 (Feb. 1957), pp. 155-61.
77. Wolfson, R. J. "A Mathematical Model for Studying Agricultural Wage Differentials," Econometrica, Vol. 23, No. 2 (July 1955), pp. 340-41.
78. Yeh, M. H. "The Labor Market with Particular Reference to Canadian Agriculture," Journal of Farm Economics, Vol. 49, No. 5 (Dec. 1967), pp. 1257-70.
79. \_\_\_\_\_, and L. K. Li. "A Regional Analysis of Supply and Demand of Farm Labor in Canada," Canadian Journal of Agricultural Economics, Vol. 14, No. 2 (1966), pp. 15-31.

U.S. Department  
of Agriculture

1. Baum, S., R. E. Friend, and R. R. Stansberry. The Hired Farm Working Force of 1961. AER-36. U.S. Dept. Agr., Econ. Res. Serv., May 1963.
2. Bowles, G. K., and W. E. Sellers. The Hired Farm Working Force of 1963: With Supplementary Data For 1962. AER-76. U.S. Dept. Agr., Econ. Res. Serv., May 1965.
3. Bowles, G. K. The Hired Farm Working Force of 1964. AER-82. U.S. Dept. Agr., Econ. Res. Serv., Aug. 1965.
4. \_\_\_\_\_. The Hired Farm Working Force of 1965, a Statistical Report. AER-98. U.S. Dept. Agr., Econ. Res. Serv., Sept. 1966.
5. \_\_\_\_\_, and C. L. Beale. Characteristics of the Population of Hired Farmworker Households. AER-84. U.S. Dept. Agr., Econ. Res. Serv., Aug. 1965.
6. Cowhig, J. D., and S. T. Maitland. An Analysis of the Experienced Hired Farm Working Force, 1948-1957. AIB-225. U.S. Dept. Agr., Agr. Res. Serv., Apr. 1960.
7. Cowhig, H. D. Education, Skill Level, and Earnings of the Hired Farm Working Force of 1961. AER-26. U.S. Dept. Agr., Econ. Res. Serv., Mar. 1963.



8. Ferguson, W. L. Farm Labor Used for Fruits and Tree Nuts, 1964. SB-436. U.S. Dept. Agr., Econ. Res. Serv., May 1969.
9. Friend, R. E., and R. R. Stansberry. The Hired Farm Working Force of 1960. AIB-266. U.S. Dept. Agr., Agr. Res. Serv., July 1962.
10. \_\_\_\_\_, and S. Baum. Economic, Social, and Demographic Characteristics of Spanish-American Wage Workers on U.S. Farms. AER-27. U.S. Dept. Agr., Econ. Res. Serv., Mar. 1963.
11. Gavett, E. E. Labor Used for Fruits and Tree Nuts. SB-232. U.S. Dept. Agr., Crop Rptg. Board, June 1958.
12. \_\_\_\_\_. Labor Used to Produce Vegetables; Estimates by States, 1959. SB-341. U.S. Dept. Agr., Econ. Res. Serv., Mar. 1964.
13. Hecht, R. W., and G. T. Barton. Gains in Productivity of Farm Labor. TB-1020. U.S. Dept. Agr., Bur. Agr. Econ., Dec. 1950.
14. \_\_\_\_\_, and Q. M. Morgan. Labor and Power Used for Farm Enterprises, Pennsylvania, 1950. FM-102. U.S. Dept. Agr., Bur. Agr. Econ., Feb. 1953.
15. \_\_\_\_\_, and K. R. Vice. Labor Used for Field Crops. SB-144. U.S. Dept. Agr., Crop Rptg. Board, June 1954.
16. Hecht, R. W. Labor for Farm Work, 1954. ARS-43-3. U.S. Dept. Agr. Agr. Res. Serv., Aug. 1954.
17. \_\_\_\_\_. Labor Used for Livestock. SB-161. U.S. Dept. Agr. Crop Rptg. Board, May 1955.
18. \_\_\_\_\_. Labor for Farm Work, 1955. ARS-43-21. U.S. Dept. Agr., Agr. Res. Serv., Sept. 1955.
19. \_\_\_\_\_. Labor Used to Produce Livestock, Estimates by States, 1959. SB-336. U.S. Dept. Agr., Econ. Res. Serv., Sept. 1963.
20. Irwin, G. D., and J. B. Penn. Custom Farm Services in the U.S.: Status and Potentials. ERS-583. U.S. Dept. Agr., Econ. Res. Serv., Mar. 1975.
21. Maitland, S. T. The Hired Farm Work Force of 1954. AMS-103. U.S. Dept. Agr., Agr. Mktg. Serv., Mar. 1956.

22. \_\_\_\_\_, and D. A. Fischer. Area Variations in the Wages of Agricultural Labor in the United States. TB-1177. U.S. Dept. Agr., Stat. Rptg. Serv., Mar. 1958.
23. Maitland, S. T. The Hired Farm Work Force of 1956. AIB-187. U.S. Dept. Agr., Agr. Res. Serv., Apr. 1958.
24. \_\_\_\_\_, and D. A. Fischer. The Hired Farm Working Force of 1957. AIB-208. U.S. Dept. Agr., Agr. Res. Serv., June 1959.
25. \_\_\_\_\_, R. R. Stansberry, and R. E. Friend. The Hired Farm Working Force of 1959. AIB-238. U.S. Dept. Agr., Agr. Res. Serv., Apr. 1961.
26. McElroy, R. C., R. W. Hecht, and E. E. Gavett. Labor Used to Produce Field Crops; Estimates by States. SB-346. U.S. Dept. Agr., Econ. Res. Serv., May 1964.
27. McElroy, R. C. The Hired Farm Working Force of 1966, A Statistical Report. AER-120. U.S. Dept. Agr., Econ. Res. Serv., Sept. 1967.
28. \_\_\_\_\_. The Hired Farm Working Force of 1967; A Statistical Report. AER-148. U.S. Dept. Agr., Econ. Res. Serv., Sept. 1968.
29. \_\_\_\_\_. The Hired Farm Work Force of 1970. AER-201. U.S. Dept. Agr., Econ. Res. Serv., Mar. 1971.
30. \_\_\_\_\_. The Hired Farm Work Force of 1971. AER-222. U.S. Dept. Agr., Econ. Res. Serv., Mar. 1972.
31. \_\_\_\_\_. The Hired Farm Work Force of 1972. AER-239. U.S. Dept. Agr., Econ. Res. Serv., Mar. 1973.
32. \_\_\_\_\_. The Hired Farm Work Force of 1973. AER-265. U.S. Dept. Agr., Econ. Res. Serv., Mar. 1974.
33. Metzler, W. H., R. A. Loomis, and N. L. Leray. The Farm Labor Situation in Selected States, 1965-66. AER-110. U.S. Dept. Agr., Econ. Res. Serv., Apr. 1967.
34. Rapton, A. Seasonal Work Patterns of the Hired Farm Working Force of 1964. AER-102. U.S. Dept. Agr., Econ. Res. Serv., Oct. 1966.
35. \_\_\_\_\_. Domestic Migratory Farm Workers, Personal and Economic Characteristics. AER-121. U.S. Dept. Agr., Econ. Res. Serv., Sept. 1967.

36. \_\_\_\_\_. A Socio-Economic Profile of 1965 Farm Wage Force. AER-157. U.S. Dept. Agr., Econ. Res. Serv., Apr. 1969.
37. Rasmussen, W. D. A History of the Emergency Farm Labor Supply Program. M-13298. U.S. Dept. Agr., Stat. Rpt. Serv., Sept. 1951.
38. Rowe, G. The Hired Farm Working Force of 1977. AER-437. U.S. Dept. Agr., Econ. Stat. Coop. Serv., Mar. 1978.
39. Sellers, W. E., and T. E. Eichers. Farm Labor Inputs, 1964. SB-438. U.S. Dept. Agr., Econ. Res. Serv., June 1969.
40. Sellers, W. E. Labor Used on U.S. Farms, 1964 and 1966. SB-456. U.S. Dept. Agr., Econ. Res. Serv., Oct. 1970.
41. \_\_\_\_\_. Crop Reporting Board. Farm Employment; Monthly by States, 1950-57; United States, by Years, 1910-57, by Months, 1940-57. SB-236, Sept. 1958.
42. \_\_\_\_\_. SRS Farm Employment; Family and Hired Workers, Annual Averages: States 1950-59; U.S. 1910-1959. SB-334, 1963.
43. \_\_\_\_\_. Economic Research Service. Employment in Agriculture and Agribusiness Occupations. U.S. Summary. ERS-570-580, Region 1-10, Aug. 1974-Dec. 1974.

#### Experiment Stations

1. Bailey, R. A., and J. H. Sitterley. Man Labor in the Commercial Hog Enterprise. Ohio Agr. Exp. Sta., Res. Bull. 792, Sept. 1957.
2. Bradford, G. L. and L. A. Nelson. Labor Costs in Conventional Production of Flue-Cured Tobacco; Their Magnitude and Variability. N.C. Agr. Exp. Sta., Tech. Bull. 190, Feb. 1969.
3. Cunningham, L. C. An Economic Study of Regular Hired Labor. Cornell Univ. Agr. Exp. Sta., P-1026, 1976.
4. Dawson, G. R. Preliminary Investigation of Farm Labor Conditions in New Mexico. N. Mex. Agr. Exp. Sta., Res. Rep. 41, Apr. 1960.
5. \_\_\_\_\_. Value of Perquisites for Hired Domestic Farm Labor. N. Mex. Agr. Exp. Sta., Res. Rep. 102, July 1965.



6. Dehart, W. A., and W. H. Metzler. Labor Structure and Labor Problems; Utah Sheep Ranches 1951-52. Utah Agr. Exp. Sta., B-378, Sept. 1955.
7. Dovring, F. Productivity of Labor in Agricultural Production. Ill. Agr. Exp. Sta., Bull. 726, Sept. 1967.
8. Galloway, R. E. Rural Manpower in Eastern Kentucky; A Study of Underemployment Among Rural Workers in Economic Area 8. Ky. Agr. Exp. Sta., B-627, June 1955.
9. Hammonds, T. M., R. Yadav, and C. Vathana. The Hired Farm Labor Market: Some Recent Evidence from Oregon. Oreg. Agr. Exp. Sta., Tech. Bull. 127, 1974.
10. Johnson, O. R. The Agricultural Labor Problem. Mo. Agr. Exp. Sta., B-563, Nov. 1951.
11. Keen, R. C., and L. E. Wilson. Full Time Hired Labor on Alabama Dairy Farms. Auburn Univ., Ala. Agr. Exp. Sta., Bull. 475, Dec. 1975.
12. Lanpher, H., and A. R. Hagan. Beef Cattle Labor Requirements. Mo. Agr. Exp. Sta., Spec. Rep. 45, Oct. 1964.
13. Long, E. J., and K. H. Parsons. How Family Labor Affects Wisconsin Farming. Wis. Agr. Exp. Sta., Res. Bull. 167, May 1950.
14. Magee, A. C., B. H. Stone, and R. H. Rogers. Labor Requirements for Dairy Herds in East Texas. Tex. Agr. Exp. Sta., Prog. Rep. 1845, Feb. 1956.
15. Motheral, J. R., W. H. Metzler, and L. J. Ducoff. Sources of Cotton Labor, Texas High Plains. Tex. Agr. Exp. Sta., Prog. Rep. 1491, Aug 1952.
16. \_\_\_\_\_. Labor Turnover in Cotton Production. Tex. Agr. Exp. Sta., Prog. Rep. 1506, Nov. 1952.
17. Ranney, W. P. Labor Used in Production of Livestock and Livestock Products in Tennessee, 1955. Tenn. Agr. Exp. Sta., Circ. 6, Jan. 1956.
18. \_\_\_\_\_. The Labor Force on Tennessee Farms. Tenn. Agr. Exp. Sta., B-304, Oct. 1959.

19. Tarver, J. D. A Study of Rural Manpower in Southeastern Oklahoma, Okla. Agr. Exp. Sta., Tech. Bull. T-56, Sept. 1955.
20. \_\_\_\_\_. Oklahoma Farm Manpower Needs, Okla. Agr. Exp. Sta., B-505, Apr. 1958.
21. \_\_\_\_\_, P. C. Sharma, and E. E. Brown. Farm Manpower Requirements in Georgia 1960-70. Ga. Agr. Exp. Sta., Res. Rep. 100, Apr. 1971.
22. Taylor, L., and A. R. Jones. Louisiana's Human Resources, II. Agribusiness and the Labor Force. La. Agr. Exp. Sta., B-562, Feb. 1963.
23. Wills, J. E., and Koeller, H. L. Employment and Income of Rural Families in Southern Illinois. Ill. Agr. Exp. Sta., B-580, Aug. 1954.
24. Wolfe, J. An Economic Evaluation of Wage Rates and Incentive Agreements for Full Time Hired Labor on Oklahoma Farms. Okla. Agr. Exp. Sta., Bull. 713, Oct. 1976.

Ph.D. Dissertations

1. Arcus, P. L. "Projections of Farm Employment in the United States Through 1980." Ph.D. Dissertation. Iowa State Univ., 1968.
2. Bauer, L. L. "The Effect of Technology on the Farm Labor Market." Ph.D. Dissertation. N.C. State Univ., 1968.
3. Blank, O. U. "OASI Date of the Farm Labor Force." Ph.D. Dissertation. Mich. State Univ., 1961.
4. Cheng, K. C. "Economic Development and Geographic Disparities in Farm Wage Rates in Michigan, 1940-1957." Ph.D. Dissertation. Mich. State Univ., 1959.
5. Cochran, C. L. "Hired Farm Labor and the Federal Government." Ph.D. Dissertation. Univ. of N.C., 1951.
6. Cunningham, F. L. "An Analysis of the Development, Operation, and Economic Significance of the Farm Labor Market of Memphis, Tennessee." Ph.D. Dissertation. Vanderbilt Univ., 1963.

7. Dance, M. E. "Agriculture and Labor Legislation." Ph.D. Dissertation. Univ. Wis., 1954.
8. Davies, D. G. "Agricultural Labor Requirements and Urban Growth." Ph.D. Dissertation. Univ. N.C., 1963.
9. Dolp, F. "Stabilizing Employment of Farm Labor Through Cooperative Organization: A Study of Sequoia Farm Labor Organization, Tulare County, California." Ph.D. Dissertation. Univ. Calif. (Berk.), 1964.
10. Elterich, J. G. "Labor Use for Michigan Agriculture 1959 With Projections for 1970-75." Ph.D. Dissertation. Mich. State Univ., 1964.
11. Gallasch, H. F., Jr. "The Impact of Minimum Wage Legislation on the Farm Labor Market." Ph.D. Dissertation. N.C. State Univ., 1973.
12. Givan, W. D. "The Effects of Various Wage Rates on Farm Organization and Structure in Southwest Virginia." Ph.D. Dissertation. Va. Poly. Inst., 1969.
13. Glover, T. F. "Seasonal Employment of Hired Labor in U.S. Agriculture." Ph.D. Dissertation. Purdue Univ., 1971.
14. Helmers, G. A. "Factors Affecting the Demand for Farm Labor." Ph.D. Dissertation. Iowa State Univ., 1965.
15. Herbst, J. H. "Changes in Labor Productivity in Illinois Agriculture, 1944 to 1954." Ph.D. Dissertation. Univ. Ill., 1957.
16. Hsu, C. "Education, Production and Labor Substitution in Agriculture." Ph.D. Dissertation. N.C. State Univ., 1977.
17. Huber, P. B. "Disguised Unemployment in U.S. Agriculture, 1959." Ph.D. Dissertation. Yale Univ., 1970.
18. Hull, F. L., Jr. "The Effect of Braceros on the Agricultural Labor Market in California 1950-70: Public Law 78 and its Aftermath." Ph.D. Dissertation. Univ. Ill., 1973.
19. Jenkins, L. C. "Adjustment Responses of N.W. Kentucky Commercial Farmers to Changes in Cost and Availability of Resources." Ph.D. Dissertation. Univ. Ky., 1970.



20. Johnson, S. S. "A Quantitative Analysis of the Demand for and Supply of Farm Labor." Ph.D. Dissertation. Iowa State Univ., 1961.
21. Johnston, W. E. "The Supply of Farm Operators." Ph.D. Dissertation. Univ. N.C., 1964.
22. Kendrick, R. J. "Regional Markets for Seasonal Hired Farm Labor in the United States." Ph.D. Dissertation. Princeton Univ., 1973.
23. Leftwich, H. M. "The Migratory Harvest Labor Market: An Illinois Case Study." Ph.D. Dissertation. Univ. Ill., 1965.
24. Lyon, R. M. "The Legal Status of American and Mexican Migratory Farm Labor: An Analysis of U.S. Farm Labor Legislation, Policy and Administration." Ph.D. Dissertation. Cornell Univ., 1954.
25. Marcus, P. "The Economics of Seasonal Farm Labor in New Jersey." Ph.D. Dissertation. Rutgers-N.J. State Univ., 1966.
26. Marr, J. M. "An Analysis of Potential Farm Labor Mobility in the Northern Coastal Plain Region of South Carolina." Ph.D. Dissertation. Clenson Univ., 1967.
27. Martinos, N. S. "A. Economic Models of the Labor Market in the Farm Sector of the North Central Region of the U.S. B. The Demand for Farm Labor in the U.S." Ph.D. Dissertation. Iowa State Univ., 1973.
28. Mosback, E. J. "Fitting a Static Supply and Demand Function for Labor." Ph.D. Dissertation. Iowa State Univ., 1957.
29. Mundy, S. D. "Technology and the Farm Labor Market." Ph.D. Dissertation, Univ. Tenn., 1972.
30. Pfeiffer, R. L. "Factors Influencing Labor Force Migration in Missouri, 1960-70." Ph.D. Dissertation. Univ. Mo., 1975.
31. Rulison, M. "Agricultural Resource Adjustment and Farm Labor Force Decline, 1950-1959: A Comparative Interregional Study." Ph.D. Dissertation. Univ. Calif. (Berk.), 1966.

32. Shane, R. L. "Labor Supply of Wives and Young Family Members in the Hired Farm Work Force." Ph.D. Dissertation. N.C. State Univ., 1976.
33. Talbert, L. E. "A Study of the Extent of Labor Maladjustment and Differential Rates of Change in Labor Earnings for Specified Areas and Size and Types of Farms, 1949-1959." Ph.D. Dissertation. Univ. N.C., 1964.
34. Tyrchniewicz, E. W. "An Econometric Study of the Agricultural Labor Market." Ph.D. Dissertation. Purdue Univ., 1967.
35. Wang, G. H. "Estimators for the Simultaneous Equation Model With Lagged Endogenous Variables and Autocorrelated Errors: With Application to the U.S. Farm Labor Market." Ph.D. Dissertation. Iowa State Univ., 1976.
36. Winkleman, D. L. "Some Factors Affecting the Agricultural Labor Supply in Minnesota." Ph.D. Dissertation. Univ. Minn., 1963.

#### M.S. Theses

1. Allbee, R. A. "Economic Effects of Extending Unemployment Compensation to Agriculture." M.S. Thesis. Univ. Conn., 1972.
2. Arcia, G. "Agricultural Labor Supply and Unemployment Insurance." M.S. Thesis. Univ. Fla., 1976.
3. Birla, Suresh C. "Sources and Productivity of Labor on Grain and Livestock Farms in Illinois." M.S. Thesis. Univ. Ill., 1967.
4. Bjorlie, W. E. "Projections of Labor Supply and Demand in Southeastern North Dakota." M.S. Thesis. N. Dak. State Univ., July 1973.
5. Blumhardt, O. "Estimating Labor Supply in North Dakota." M.S. Thesis. N. Dak. State Univ., 1976.
6. Bodnar, D. "Estimation of the Total Cost of Employing Contract Puerto Ricans on Selected New Jersey Peach and Apple Farms, 1971-76." M.S. Thesis. Rutgers-N.J. State Univ., 1978.
7. Buxton, F. K. "An Analysis of Changes in Labor Income Per Operator on 110 New York Dairy Farms, 1956-58." M.S. Thesis. Cornell Univ., 1960.

8. Callahan, J. W. "A Case Study of Labor Inputs and Costs for the Production of Connecticut Valley Shade Grown Tobacco." M.S. Thesis Univ. Mass., 1953.
9. Casler, G. L. "Type of Labor and Labor Pattern of Farms in Four Areas of New York State." M.S. Thesis. Cornell Univ., 1959.
10. Christman, S. F. "A Study of Workmens' Compensation for Agricultural Employers in Michigan." M.S. Thesis. Mich. State Univ., 1970.
11. Conklin, N. C. "The Impact of Energy Development on Agricultural Producers Through the Rural Labor Market." M.S. Thesis. Univ. Wyo., 1977.
12. Cook, Neil R. "Labor Productivity on Nebraska Farms." M.S. Thesis. Univ. Neb., 1962.
13. Gailey, D. W. "Migration From Agriculture: A Historical Analysis." M.S. Thesis. Mich. State Univ., 1973.
14. Green, R. W. "An Economic Analysis of Georgia Farm Wage Rates." M.S. Thesis. Univ. Ga., 1952.
15. Howell, D. W. "An Econonic Study of Full Time Labor on Indiana Farms." M.S. Thesis. Purdue Univ., 1971.
16. Hvinden, S. C. "Use of Labor and Management Time on North Dakota Grain Farms." M.S. Thesis. N. Dak. State Univ., 1977.
17. Johnston, J. P. "Predicting Future Farm Labor in Iowa for Small Geographic Areas." M.S. Thesis. Iowa State Univ., 1972.
18. Leunis, Joseph V. "Productivity of Accumulated Labor in U.S. Agriculture: Analyses by Farm Types." M.S. Thesis. Univ. Ill., 1965.
19. Mabbs-Zeno, C. C. "Incentive Contracts for Hired Farm Workers on Dairy Farms in Georgia." M.S. Thesis. Univ. Ga., 1977.
20. Marks, L. "Attracting and Holding Farm Cooperative Labor." M.S. Thesis. Colo. State Univ., 1974.
21. Marler, H. E. "Labor Underemployment in Rural Eastern Oklahoma, 1959." M.S. Thesis. Okla. State Univ., 1963.



22. Poveda, J. A. "Earnings Differentials Among Florida Male Farm Workers." M.S. Thesis. Univ. Fla., 1977.
23. Simon, S. R. "Some Likely Effects on Massachusetts Agriculture of Proposed Federal Minimum Wages for Agricultural Workers." M.S. Thesis. Univ. Mass., 1962.
24. Sommers, D. A. "The Effect of Rising Labor Price on Typical Hennepin Area Hog Farm Organizations." M.S. Thesis. Univ. Ill., 1971.
25. Turley, K. P. "Estimation of a Demand and Supply Model for the Hired Labor Market in Texas." M.S. Thesis. Tex. A & M Univ., 1977.
26. Vathana, C. "A Study of Demand and Supply Relationships in the Agricultural Labor Market." M.S. Thesis. Oreg. State Univ., 1972.
27. Voldemar, V. "Labor Supply and Efficiency on Farms in New York and Northern Pennsylvania, 1951." M.S. Thesis. Cornell Univ., 1952.
28. Von Lanken, George D. "Classification of Labor Inputs on Northern Illinois Hog Farms." M.S. Thesis. Univ. Ill., 1959.
29. Walker, T. S. "Economic Analysis of the Domestic and Foreign Hired Agricultural Labor Markets in Florida." M.S. Thesis. Univ. Fla., 1975.
30. Wolfe, J. M. "An Economic Evaluation of Farm Labor Incentive Agreements in Oklahoma." M.S. Thesis. Okla. State Univ., 1973.

Ongoing Current  
Research Infor-  
mation System  
(CRIS) Projects

1. Elterich, J. G. "Economic Analysis of Rural Manpower." Univ. Del., Newark, Del. Period: 7-1-76 to 6-30-81. Objectives: Labor market analysis impact of institutional or legislative parameters in the work force field on people, firms or industries, labor management issues, and socioeconomic characteristics of rural employees and employers.
2. Morgan, L. C. "An Economic Analysis of Agricultural Labor Productivity in the Texas Rio Grande Valley." Tex. A & M Univ., College Station, Tex. Period: 10-1-75 to 11-26-83. Objectives: Estimates the economic value of hired agricultural labor in the Texas Rio Grande Valley

for various levels of total labor utilized and for various levels of labor utilized in each major agricultural enterprise; and compares the estimated economic values of hired agricultural labor with the prevailing wage rate to determine the optimum level of labor utilization for each major agricultural enterprise.

Completed Current  
Research Infor-  
mation System  
(CRIS) Projects

1. Winkler, A. L. "Labor Unionization in Farm Equipment Manufacture: Effects on Profits (Costs)." Kans. State Univ., Manhattan, Kans. Period: 7-1-77 to 5-31-78. Objectives: Identified a relationship between the wages deflated for price increases and the return of net income on sales of the International Harvester Co. The basic hypothesis was that there is a significant relationship between "union wage increases" and prices in the farm equipment manufacture industry. It was assumed that the rising real wage rate, through its impact on the return on sales, will at some point in time, depending upon market conditions and strategic pricing decisions, affect product prices. The possible direct impact of wage increases upon machinery's wholesale price was also tested.

LAND

Books

1. Barlowe, R. Land Resource Economics: The Economics of Real Estate. 3rd ed. Englewood Cliffs, N.J.: Prentice-Hall Inc., 1978.
2. Clark, C. The Value of Agricultural Land. Oxford, England: Pergamon Press, 1973.
3. Harriss, C. L. Government Spending and Land Values - Public Money and Private Gain. Madison, Wis.: Univ. Wis. Press, 1973.
4. Murray, W. G. Farm Appraisal and Valuation. 5th ed. Ames, Iowa: Iowa State Univ. Press, 1969.
5. Oppenheimer, H. L. Cowboy Economics - Rural Land as an Investment. 2nd ed. Danville, Ill.: The Interstate Printers & Pub., Inc., 1971.
6. \_\_\_\_\_. Land Speculation: An Evaluation and Analysis. Danville, Ill.: The Interstate Printers & Pub., Inc., 1972.

7. Rossmiller, G. E., and A. Larsen. The Overproduction Trap in U.S. Agriculture. Chapter 9: "Land." Editors, Glen Johnson and C. L. Quance. Baltimore, Md.: The Johns Hopkins Univ. Press, 1972, pp. 137-55.
8. Salter, L. A. A Critical Review of Research in Land Economics. Madison, Wis.: Univ. Wis. Press, 1967.
9. Scofield, W. H., and T. J. Pressly. Farm Real Estate Values in the United States by Counties, 1850-1959. Seattle, Wash.: Univ. Wash. Press, 1965.

#### Journals

1. Abel, H. "Effect of Expanding Western Population on Livestock Marketing and Range Value," Appraisal Journal, Vol. 21, No. 2 (Apr. 1953), pp. 239-43.
2. Aines, R. O. "Farmland Valuation and Farm Programs," Journal of Farm Economics, Vol. 46, No. 5 (Dec. 1964), pp. 1253-59.
3. Anderson, K. B., and O. L. Walker. "Estimated Returns from Renting Out Farmland in Selected Areas of Oklahoma," Oklahoma Current Farm Economics, Vol. 48, No. 3 (Oct. 1975), pp. 20-31.
4. Barber, E. L., and R. R. Botts. "Use of Yield Variability Data in the Estimation of Land Values," Agricultural Finance Review, Vol. 14 (Nov. 1951), pp. 1-7.
5. Becker, R. J. "Land Valued as a Commodity," Journal of the American Society of Farm Managers and Rural Appraisers, Vol. 22, No. 2 (Apr. 1958), pp. 32-37.
6. Bentick, B. L. "Improving the Allocation of Land Between Speculators and Users: Taxation and Paper Land," Economic Record, Vol. 48, No. 121 (Mar. 1972), pp. 18-41.
7. Bhatia, K. B. "USDA Series on Net Investment in Farm Real Estate - A Critique," Journal of American Statistical Association, Vol. 66, No. 335 (Sept. 1971), pp. 492-95.
8. Blase, M. G., and C. Hesemann. "Farmland Prices: Explainable or Illogical?" Southern Journal of Agricultural Economics, Vol. 5, No. 1 (July 1973), pp. 265-70.



9. \_\_\_\_\_. "Toward a Better Explanation of Land Prices," Journal of the American Society of Farm Managers and Rural Appraisers, Vol. 37, No. 2 (Oct. 1973), pp. 17-22.
10. Boxley, R. F., W. L. Gibson, and B. R. Hoffnar. "The Application of Probability Theory Analysis to Nonrandom Enumeration Data," Journal of Farm Economics, Vol. 46, No. 4 (Nov. 1964), pp. 835-40.
11. Brooker, M. A. "Problems of Normal Value with Rising Prices," Journal of Farm Economics, Vol. 34, No. 5 (Dec. 1952), pp. 937-43.
12. Bullock, J. B., W. L. Nieuwoudt, and E. C. Pasour. "Land Values and Allotment Rents," American Journal of Agricultural Economics, Vol. 59, No. 2 (May 1977), pp. 380-84.
13. Chryst, W. E. "Land Values and Agricultural Income: A Paradox?" Journal of Farm Economics, Vol. 47, No. 5 (Dec. 1965), pp. 1265-73.
14. Clark, C. "The Value of Agricultural Land," American Journal of Agricultural Economics, Vol. 51, No. 1 (Jan. 1969).
15. Clery, P. A., and P. D. P. Wood. "Agricultural Land Values (1962-1964)," Journal of Agricultural Economics, Vol. 16, No. 4 (Dec. 1965), pp. 567-72.
16. Clifton, I. D. "Using the Automatic Interaction Detection (AID) Model to Obtain Homogeneous Classifications of Farmland Markets," Agricultural Economic Research, Vol. 27, No. 3 (July-Oct. 1975), pp. 93-100.
17. Crouse, E. F. "Commodity Prices and Farm Land Values," Journal of the American Society of Farm Managers and Rural Appraisers, Vol. 15, No. 2 (Oct. 1951), pp. 161-64.
18. Deaton, B. J., and S. D. Mundy. "Real Property Taxes and Farm Real Estate Values: Incidence and Implications: Comment," American Journal of Agricultural Economics, Vol. 57, No. 1 (Feb. 1975), pp. 125-26.
19. Diesslin, H. G. "Effect of Improving Technology on Land Values," Journal of the American Society of Farm Managers and Rural Appraisers, Vol. 20, No. 1 (Apr. 1956), pp. 38-42.

20. Dovring, F. "The Farm Land Boom in Illinois," Illinois Agricultural Economics, Vol. 17, No. 3 (July 1977), pp. 34-38.
21. Elefson, R. V. "The Rediscount Market for Land Contracts," Land Economics, Vol. 36, No. 4 (Nov. 1960), pp. 391-94.
22. Gale, J. F. "What Makes Farm Real Estate Prices," Agricultural Finance Review, Vol. 24 (June 1963), pp. 8-17.
23. Gordon, P., and P. S. Lande. "The Pricing of Goods and Agricultural Land in Multiregional General Equilibrium: Comment," Southern Economic Journal, Vol. 40, No. 1 (July 1973), pp. 143-44.
24. Hall, H. C. "Farm Real Estate Values," Journal of the American Society of Farm Managers and Rural Appraisers, Vol. 23, No. 2 (Oct. 1959), pp. 8-11.
25. Hammill, A. E. "Variables Related to Farm Real Estate Values in Minnesota Counties," Agricultural Economics Research, Vol. 21, No. 2 (Apr. 1969), pp. 45-50.
26. Harris, D. G., and R. F. Nehring. "Impact of Farm Size on the Bidding Potential for Agricultural Land," American Journal of Agricultural Economics, Vol. 58, No. 2 (May 1976), pp. 161-69.
27. \_\_\_\_\_. "Impact of Farm Size on the Bidding Potential for Agricultural Land: Reply," American Journal of Agricultural Economics, Vol. 59, No. 2 (May 1977), pp. 388-90.
28. Hartwick, J. M. "The Pricing of Goods and Agricultural Land in Multiregional General Equilibrium: Reply," Southern Economic Journal, Vol. 40, No. 1 (July 1973), pp. 144-45.
29. Held, R. B. "Discussion: Investment in Farm Real Estate," Journal of Farm Economics, Vol. 45, No. 2 (May 1963), pp. 406-08.
30. Herdt, R. W., and W. W. Cochrane. "Farm Land Prices and Farm Technological Advance," Journal of Farm Economics, Vol. 48, No. 2 (May 1966), pp. 243-63.
31. Herr, W., and W. L. Montgomery. "Factors Affecting Farm Mortgage Loan Recordings, 1948-68," Agricultural Finance Review, Vol. 32 (Aug. 1971), pp. 35-41.

32. Hoover, D. M. "An Economic Analysis of Farmland Development," Agricultural Economics Research, Vol. 22, No. 2 (Apr. 1970), pp. 37-44.
33. \_\_\_\_\_. "The Computation of Returns on Agricultural Real Estate, 1940-60," Land Economics, Vol. 41, No. 1 (Feb. 1965), pp. 81-86.
34. Hottel, J. B. "Resource Pricing of Land and Mobile Rice Allotments," Journal of the American Society of Farm Managers and Rural Appraisers, Vol. 35, No. 1 (Apr. 1971), pp. 45-49.
35. Hoyt, H. "Changing Patterns of Land Values," Land Economics, Vol. 36, No. 2 (May 1960), pp. 109-17.
36. Hurlburt, V. L. "Economic Effects of Flexible Land Credit Arrangements," Journal of Farm Economics, Vol. 35, No. 1 (Feb. 1953), pp. 110-21.
37. Iden, G. "Farmland Values Reexplored," Agricultural Economics Research, Vol. 16, No. 2 (Apr. 1964), pp. 41-50.
38. Jennings, R. J., Jr. , and D. D. Kletke. "Regression Analysis in Analyzing Farm Values: A North Central Oklahoma Application," Journal of the American Society of Farm Managers and Rural Appraisers, Vol. 41, No. 2 (Oct. 1977), pp. 54-61.
39. Johnson, B. B., "Returns to Farm Real Estate," Agricultural Finance Review, Vol. 31 (June 1970), pp. 27-34.
40. \_\_\_\_\_. "Estimating Rates of Return on Farmland Investments," Journal of the American Society of Farm Managers and Rural Appraisers, Vol. 38, No. 2 (Oct. 1974), pp. 41-48.
41. Johnson, B. B , and D. A. Lins. "Farmland Leasing and Uncertainty," Agricultural Finance Review, Vol. 35 (Oct. 1974), pp. 65-68.
42. Klinefelter, D. A. "Factors Affecting Farmland Values in Illinois," Illinois Agricultural Economics, Vol. 13, No. 1 (Jan. 1973), pp. 27-33.
43. Knetsch, J. L. "The Influence of Reservoir Projects on Land Values," Journal of Farm Economics, Vol. 46, No. 1 (Feb. 1964), pp. 231-43.



44. Kuhlman, R. H., and J. S. Plaxico. "U.S. Farm Land Price Trends, 1910-77," Oklahoma Current Farm Economics, Vol. 51, No. 4 (Dec. 1978).
45. Kurnow, E. "Land Value Trends in the United States," Land Economics, Vol. 36, No. 4 (Nov. 1960), pp. 341-48.
46. Lee, W. F., and N. Rask. "Inflation and Crop Profitability: How Much Can Farmers Pay for Land?" American Journal of Agricultural Economics, Vol. 58, No. 5 (Dec. 1976), pp. 984-90.
47. Libby, L. W. "Land Use Policy: Implications for Commercial Agriculture," American Journal of Agricultural Economics, Vol. 56, No. 5 (Dec. 1974), pp. 1143-52.
48. Maier, F. H. "Discussion: Prevailing Land Market Forces," Journal of Farm Economics, Vol. 39, No. 5 (Dec. 1957), pp. 1510-13.
49. Mauch, A. "Agricultural Problems Affecting Future Real Estate Markets," Appraisal Journal, Vol. 22, No. 4 (Oct. 1954), pp. 576-80.
50. Meenen, H. J. "The Impact of Technology and Governmental Programs Upon Land Values," Journal of the American Society of Farm Managers and Rural Appraisers, Vol. 21, No. 1 (Apr. 1957), pp. 76-81.
51. Milliman, J. W. "Land Values as Measures of Primary Irrigation Benefits," Journal of Farm Economics, Vol. 41, No. 2 (May 1959), pp. 234-43.
52. \_\_\_\_\_. "Land Values - A Further Comment," Journal of Farm Economics, Vol. 42, No. 1 (Feb. 1960), pp. 178-79.
53. Montgomery, A. A., and J. R. Tarbet. "Land Returns and Farm Real Estate Values," Agricultural Economic Research, Vol. 20, No. 1 (Jan. 1963), pp. 5-16.
54. Munger, J. A. "Components of Rural Land Values in Northern Wisconsin," Land Economics, Vol. 40, No. 1 (Feb. 1964), pp. 87-91.
55. Parcher, L. A. "Capitalization Rates for Rural Properties," Appraisal Journal, Vol. 30, No. 1 (Jan. 1962), pp. 27-32.

56. Pasour, E. C., Jr. "The Capitalization of Real Property Taxes Levied on Farm Real Estate," American Journal of Agricultural Economics, Vol. 57, No. 4 (Nov. 1975), pp. 539-48.
57. \_\_\_\_\_. "Real Property Taxes and Farm Real Estate Values: Incidence and Implications," American Journal of Agricultural Economics, Vol. 55, No. 4 (Nov. 1973), pp. 549-56.
58. Pope, R., and others. "Evaluation of Econometric Models of U.S. Farmland Prices," Western Journal of Agricultural Economics, Vol. 4, No. 1 (July 1979), pp. 107-19.
59. Raup, P. M. "Economic Development and Competition for Land Use in the United States," Journal of Farm Economics, Vol. 39, No. 5 (Dec. 1957), pp. 1514-26.
60. \_\_\_\_\_. "Discussion: Land Values and Agricultural Income: A Paradox?" Journal of Farm Economics, Vol. 47, No. 5 (Dec. 1965), pp. 1273-77.
61. Reinsel, R. D. "Effect of Seller Financing on Land Prices," Agricultural Finance Review, Vol. 33 (July 1972), pp. 32-35.
62. Reiss, F. J. "Is \$900 Per Acre Too Much for Farmland?" Illinois Agricultural Economics, Vol. 8, No. 3 (July 1968), pp. 22-28.
63. \_\_\_\_\_. "Buying Versus Renting Farmland," Illinois Agricultural Economics, Vol. 12, No. 1 (Jan. 1972), pp. 37-40.
64. Renshaw, E. "Are Land Prices Too High: A Note on Behavior in the Land Market," Journal of Farm Economics, Vol. 39, No. 2 (May 1957), pp. 505-10.
65. \_\_\_\_\_. "Models of the Land Market--A Note," Journal of Farm Economics, Vol. 42, No. 1 (Feb. 1960), pp. 174-78.
66. Ruch, P. E. "Effects of Climate and Weather on Real Estate Values," Appraisal Journal, Vol. 22, No. 4 (Oct. 1954), pp. 531-49.
67. Ruttan, V. W. "The Impact of Local Population Pressure on Farm Real Estate Values in California," Land Economics, Vol. 37, No. 1 (Feb. 1961), pp. 125-31.

68. Ryan, J. L. "Government Regulations Affecting the Value of Agricultural Properties," Appraisal Journal, Vol. 24, No. 3 (July 1956), pp. 399-407.
69. Sargent, F. O. "Land Market and Price Analysis in an Agro-Industrial Economy," Appraisal Journal, Vol. 27, No. 3 (July 1959), pp. 359-64.
70. Schott, L. R., and F. C. White. "Multiple Regression Analysis of Farmland Values by Land Classes," Appraisal Journal, Vol. 45, No. 3 (July 1977), pp. 427-34.
71. Schuh, G. E., and W. C. Sharlach. "The Land Market as a Link Between the Rural and Urban Sectors of the Economy," Journal of Farm Economics, Vol. 44, No. 5 (Dec. 1962), pp. 1406-11.
72. Scofield, W. H. "Prevailing Land Market Forces," Journal of Farm Economics, Vol. 39, No. 5 (Dec. 1957) pp. 1500-10.
73. \_\_\_\_\_. "Land Prices and Farm Income Relationships," Agricultural Finance Review, Vol. 25 (Aug. 1964), pp. 13-22.
74. \_\_\_\_\_. "Investment in Farm Real Estate," Journal of Farm Economics, Vol. 45, No. 2 (May 1963), pp. 396-406.
75. Starks, K. W., and J. S. Plaxico. "Age of Oklahoma Farm Land Owners and the Implied Rate of Farmland Transfers and Associated Capital Requirements," Oklahoma Current Farm Economics, Vol. 51, No. 2 (June 1978), pp. 3-9.
76. Stewart, C. L. "Farmland Value Problems," Appraisal Journal, Vol. 18, No. 4 (Oct. 1950), pp. 503-11.
77. Stocker, F. D. "Taxing Farmland in the Urban Fringe," Journal of Farm Economics, Vol. 45, No. 5 (Dec. 1963), pp. 1131-39.
78. Struyk, R. J. "Flood Risk and Agricultural Land Values," Water Resources Research, Vol. 7, No. 4 (Aug. 1971), pp. 789-807.
79. Swanton, W. F. "Land Value Trends in the United States," American Journal of Economics and Sociology, Vol. 24, No. 2 (Apr. 1965), pp. 163-70.



80. Tontz, R. L. "Land Valuation and the Everyday Land Market," Journal of the American Society of Farm Managers and Rural Appraisers, Vol. 19, No. 2 (Oct. 1955), pp. 24-29.
81. \_\_\_\_\_. "Reliability of the Yearly Deed Sample of Land Prices and Transfers in Oklahoma," Land Economics, Vol. 31, No. 4 (Nov. 1955), pp. 372-78.
82. \_\_\_\_\_, C. C. Cable, Jr., and H. E. Wickes, Jr. "Enumeration Time and Costs for Land Market Surveys," Land Economics, Vol. 33, No. 1 (Feb. 1957), pp. 83-87.
83. \_\_\_\_\_, C. C. Cable, Jr., and J. Kristensen. "Reliability Deed Samples as Indicators of Land Market Activity in Oklahoma," Land Economics, Vol. 30, No. 1 (Feb. 1954), pp. 44-51.
84. Tostlebe, A. S. "Estimated Value of Farm Real Estate 1870-1950 in 1910-14 Prices," Agricultural Finance Review, Vol. 15 (Nov. 1952), pp. 1-13.
85. Tweeten, L. G., and J. E. Martin. "A Methodology for Predicting U.S. Farm Real Estate Price Variation," Journal of Farm Economics, Vol. 48, No. 2 (May 1966), pp. 378-93.
86. Vandever, L. R., and D. D. Kletke. "Current Land Market Trends: Alfalfa County, Oklahoma," Oklahoma Current Farm Economics, Vol. 50, No. 4 (Dec. 1977), pp. 9-12.
87. Walker, D. J. "A Common Error in the Market Approach to Value," Journal of the American Society of Farm Managers and Rural Appraisers, Vol. 43, No. 2 (Oct. 1979), pp. 26-28.
88. Warren, S. W. and others. "Farm Land Values," Journal of the American Society of Farm Managers and Rural Appraisers, Vol. 15, No. 2 (Oct. 1951), pp. 157-64.
89. Weeks, D. "The Impact on Farm Land Values of Increased Population," Appraisal Journal, Vol. 19, No. 4 (Oct. 1951), pp. 479-97.
90. White, F. C., W. N. Musser, and A. R. Sheffield. "Some Evidence of the Declining Importance of Farm Consolidation on Farm Real Estate Prices," Southern Journal of Agricultural Economics, Vol. 9, No. 2 (Dec. 1977), pp. 99-104.

91. Whitmore, G. A. "Impact of Farm Size on the Bidding Potential for Agricultural Land: Comment," American Journal of Agricultural Economics, Vol. 59, No. 2 (May 1977), pp. 385-87.
92. Willis, C. E., and B. E. Lindsay. "Land Value Research and Multicollinearity," Canadian Journal of Agricultural Economics, Vol. 23, No. 1 (Feb. 1975), pp. 75-78.

U.S. Department  
of Agriculture

1. Bray, C. E. Canadian Land Use. FAER-155. U.S. Dept. Agr., Econ. Stat. Coop. Serv., Aug. 1979.
2. Clifton, I. D., and W. D. Crowley, Jr. Farm Real Estate Historical Series Data: 1850-1970. ERS-520. U.S. Dept. Agr., Econ. Res. Serv., June 1973.
3. Crowley, W. D. Farmland Use Value Versus Market Prices in Three Oregon Land Markets. ERS-550. U.S. Dept. Agr., Econ. Res. Serv., Sept. 1974.
4. Eitel, V. E. Farm Mortgages Recorded in 1959: Interest Rates, Terms, and Sizes with Historical Data 1949-1959. ERS-61. U.S. Dept. Agr., Econ. Res. Serv., Apr. 1962.
5. Fuqua, O. Farm Real Estate Market Activity in Twelve Western Counties, 1941-48. U.S. Dept. Agr., Bur. Agr. Econ., 1950.
6. Holm, P. L., and W. H. Scofield. "The Market for Farm Real Estate," Yearbook of Agriculture, 1958. U.S. Dept. Agr., 1958, pp. 198-205.
7. Kasal, J. Effects of Small Watershed Development on Land Values. AER-404. U.S. Dept. Agr., Econ. Stat. Coop. Serv., May 1978.
8. Krause, K. R., and F. L. Morrison. State and Federal Legal Regulation of Alien and Corporate Land Ownership and Farm Operation. AER-284. U.S. Dept. Agr., Econ. Res. Serv., May 1975.
9. Reinsel, R. D. Land Values and Farm Finance. Vol. 6., Agr. Hndbk. 365. "Farm Real Estate Statistics," Chapter 2, U.S. Dept. Agr., Apr. 1971, pp. 7-15.
10. Reinsel, R. D., and D. D. Krenz. Capitalization of Farm Program Benefits into Land Values. ERS-506. U.S. Dept. Agr., Econ. Res. Serv., Oct. 1972.

11. Scofield, W. H., and P. L. Holm. Land Values and Farm Finance, Vol. 6., Agr. Hndbk. 118, "Farm Real Estate," Chapter 1, U.S. Dept. Agr., Agr. Res. Ser., Oct. 1957, pp. 1-12.
12. \_\_\_\_\_. "The Market for Farm Real Estate," Yearbook of Agriculture, 1958. U.S. Dept. Agr., 1958, pp. 198-205
13. \_\_\_\_\_. Land Values and Farm Finance, Vol. VI, Agr. Hndbk. 118, "Farm Real Estate," Chapter 1, U.S. Dept. Agr., Agr. Res. Ser., Oct. 1957.
14. U.S. Department of Agriculture, Economic Research Service. Our Land and Water Resources: Current and Prospective Supplies and Uses. Misc. Pub. 1290, May 1974.
15. \_\_\_\_\_, Economic Research Service. Major Uses of Land in the United States: Summary for 1969. AER-247. Dec. 1973.
16. \_\_\_\_\_, Economic Research Service. Major Uses of Land and Water in the United States with Special Reference to Agriculture. AER-149. Nov. 1968.
17. \_\_\_\_\_, Economic Research Service. State Programs for the Differential Assessment of Farm and Open Space Land. AER-256. Apr. 1974.
18. \_\_\_\_\_, Economics, Statistics, and Cooperatives Service. Farm Real Estate Market Developments. C.D.-Annual.
19. \_\_\_\_\_, Economics, Statistics, and Cooperatives Service. Who Owns the Land? ESCS-70. Sept. 1979.

#### Experiment Stations

1. Back, W. B., J. L. Hendrick, and W. L. Gibson. Effects of Acreage Allotment, Price Support Programs Upon Farmland Values. Va. Agr. Exp. Sta. Bull. 576, Sept. 1966.
2. Barlowe, R., and T. R. Alter. Use Value Assessment of Farm and Open Space Lands. Mich. Agr. Exp. Sta. Res. Rep. 308, Sept. 1976.
3. Cotner, M. L., M. E. Wirth, and G. D. Irwin. Participants in the Land Market, a Profile of Renters, Buyers, and Sellers in Lower Michigan. Mich. Agr. Exp. Sta. Res. Rep. 12, May 1964.



4. Davis, W. D., and F. Miller. Land Price Trends in Missouri. Mo. Agr. Exp. Sta. Res. Bull. 686, Jan. 1959.
5. Douring, F., and W. H. Scofield. Farm Real Estate Sales in Illinois. Ill. Agr. Exp. Sta. Bull. 697, May 1963.
6. Elefson, R. V., and P. M. Raup. Financing Farm Transfers With Land Contracts. Minn. Agr. Exp. Sta. Bull. 454, Apr. 1961.
7. Fischer, L. K., R. Burkholder, and J. Muehlbeier. Farm Real Estate Market in Nebraska. Neb. Agr. Exp. Sta. Bull. 456, Mar. 1960.
8. Foster, J. H. and others. The Agricultural Land Resource Base of Massachusetts. Mass. Agr. Exp. Sta. Bull. 639, May 1976.
9. \_\_\_\_\_, and W. MacConnell. Agricultural Land Use Change in Massachusetts 1951-71. Mass. Agr. Exp. Sta. Bull. 640, Jan. 1977.
10. Gauger, L. K., K. Kristjanson, and J. Muehlbeier. Land Sales and Assessed Values in Nebraska, 1930-52. Neb. Agr. Exp. Sta. MP-3, Jan. 1954.
11. Gile, B. M., and A. Harper. The Farm Real Estate Market in Louisiana, A Preliminary Report. La. Agr. Exp. Sta. Mimeo. C-163, July 1954.
12. Gray, J. R., and R. G. Gollehon. Sale Prices and Assessment Values of Agricultural Lands. N. Mex. Agr. Exp. Sta. B-519, Apr. 1967.
13. Greer, J. D. Land Sales, Prices, Values, and Assessed Values in Nebraska, 1930 1968. Neb. Agr. Exp. Sta. SB-504, Mar. 1969.
14. Johnson, B. B., L. Leistritz, and J. D. Greer. Farm Real Estate Market in Nebraska. Neb. Agr. Exp. Sta. SB-495, Sept. 1967.
15. Johnston, W. E. Some Characteristics of the Farm Real Estate Market in California, With Emphasis on Transactions in Imperial and Tulare Counties. Calif. Agr. Exp. Sta. Bull. 856, Jan. 1972.
16. Kletke, D. D., and J. S. Plaxico. Farmland Investment Value Appraisal and Purchase Feasibility Analysis. Okla. Agr. Exp. Sta. P-776, Oct. 1978.

17. Lassiter, R. L., Jr., and W. K. McPherson. Agricultural Land Prices in Palm Beach County, Florida, 1940-55. Fla. Agr. Exp. Sta. Bull. 608, Feb. 1959.
18. Lundy, G., and R. F. Pengra. Resale of Farmland in South Dakota; Number of Sales and Acreage Involved. S. Dak. Agr. Exp. Sta. Pam. 32, May 1951.
19. \_\_\_\_\_. Land Market Trends in South Dakota, 1941-1950. S. Dak. Agr. Exp. Sta. B-413, June 1951.
20. Mann, F. L. A Comparative Study of Laws Relating to Low Equity Transfers of Farm Real Estate in the North Central Region. Mo. Agr. Exp. Sta. Res. Bull. 782, Oct. 1961.
21. Marsh, C. F., and W. H. Pine. The Value of Farm Real Estate-A Study of Sales in Brown and Saline Counties, Kansas. Kans. State Agr. Exp. Sta. Bull. 389, Apr. 1957.
22. Moore, H. R., and R. A. Bailey. Ohio Farm Real Estate Prices. Ohio Agr. Exp. Sta. Res. Bull. 711, July 1951.
23. \_\_\_\_\_. The Ohio Farm Real Estate Situation. Ohio Agr. Exp. Sta. Res. Circ. 52, June 1958.
24. Motheral, J. R., and W. G. Adkins. Texas Farm and Ranch Land Prices, 1951. Tex. Agr. Exp. Sta. Prog. Rep. 1479, July 1952.
25. Otto, M. L., and J. E. Pallesen. Trends in Land Values in Kansas. Kans. Agr. Exp. Sta. Bull. 521, Jan. 1969.
26. Parcher, L. A. The Influence of Location on Farmland Prices. Okla. Agr. Exp. Sta. B-417, Mar. 1954.
27. Penn, J. B., B. Bolton, and W. F. Woolf. The Farm Land Market in the Mississippi River Delta Cotton Region, 1964-65. La. Agr. Exp. Sta. DAE Res. Rep. 372, Apr. 1968.
28. Pine, W. H. 100 Years of Farmland Values in Kansas. Kans. Agr. Exp. Sta. Bull. 611, Sept. 1977.
29. \_\_\_\_\_, and R. R. Hancock. Trends in Land Values in Kansas. Kans. State Agr. Exp. Sta. Bull. 581, Aug. 1974.

30. \_\_\_\_\_, L. D. Loftsgard, and W. W. Owens. Economics of Leasing Farm Machinery and Buildings. N. Dak. Agr. Exp. Sta. Bull. 450, Jan. 1964.
31. \_\_\_\_\_, and R. M. Ronnau. Rural Real Estate Transfers in 1970 in Clay County, Kansas. Kans. State Agr. Exp. Sta. Res. Pap. 15, Feb. 1973.
32. \_\_\_\_\_, and W. H. Scofield. The Farm Real Estate Market in Kansas. Kans. State Agr. Exp. Sta. Bull. 428, Jan. 1961.
33. Reynolds, J. E., and J. F. Timmons. Factors Affecting Farmland Values in the United States. Iowa Agr. & Home Econ. Exp. Sta. Res. Bull. 566, Feb. 1969.
34. Sargent, F. O. The Land Market Process in Robertson County. Tex. Agr. Exp. Sta. MP-290, July 1958.
35. Schuh, G. E., and W. C. Scharlach. Quantitative Analysis of Some Farm and Non-farm Determinants of Agricultural Land Values. Ind. Agr. Exp. Sta. Res. Bull. 821, Nov. 1966.
36. Shane, R. L., and J. W. Malone, Jr. The Agricultural Land Market in Nevada, Phase 1, Churchill County, Nevada. Nev. Agr. Exp. Sta. Rep. 84, Dec. 1971.
37. Southern, J. H. Ownership of Land in the Southwest. Ark. Agr. Exp. Sta. Bull. 502, Dec. 1950.
38. \_\_\_\_\_. Farm Land Market Situation in Southwestern States, 1946-1954. Tex. Agr. Exp. Sta. B-797, Mar. 1955.
39. \_\_\_\_\_, and J. R. Motheral. Texas Farm and Ranch Land Prices. Tex. Agr. Exp. Sta. Prog. Rep. 1271, Sept. 1950.
40. \_\_\_\_\_. Texas Farm and Ranch Land Prices, 1950. Tex. Agr. Exp. Sta. Prog. Rep. 1389, Aug. 1951.
41. \_\_\_\_\_, H. Scoggins, and J. W. White. Arkansas Land Prices in War and Peace. Ark. Agr. Exp. Sta. B-517, Nov. 1951.
42. Stephenson, J. L., and A. Vanvig. Wyoming Rural Real Estate Market. Wyo. Agr. Exp. Sta. Res. Jour. 125, May 1978.



43. Timmons, J., and J. E. Reynolds. Factors Affecting Farmland Values in the United States. Iowa Agr. Exp. Sta. Res. Bull. 566, Feb. 1969.
44. Thompson, L. S. Sale Prices of Montana Agricultural Land by Class and Grade. Mont. Agr. Exp. Sta. Bull. 583, Dec. 1963.
45. Tontz, R. L. Oklahoma Land Market Activity, 1945-52. Okla. Agr. Exp. Sta. Bull. B-412, Nov. 1953.
46. \_\_\_\_\_. Oklahoma Land Market Activity, 1952-55. Okla. Agr. Exp. Sta. Bull. B-475, Aug. 1956.
47. Tweeten, L. G., and T. R. Nelson. Sources and Repercussions of Changing U.S. Farm Real Estate Values. Okla. Agr. Exp. Sta., Apr. 1966.
48. Wise, J. O., H. J. Dover, and B. R. Miller. Factors Affecting the Value of Rural Property in North Georgia. Ga. Agr. Exp. Sta. Res. Bull. 103, Feb. 1972.
49. Wood, B. W. Rangelands and Their Value. Oreg. Agr. Exp. Sta. Spec. Rep. 337, Aug. 1971.

Ph.D. Dissertations

1. Abdel-Badie, F. "An Econometric Analysis of Factors Affecting Farm Land Values in Western Oklahoma." Ph.D. Dissertation. Okla. State Univ., 1967.
2. Amos, O. M., Jr. "Supply of Potential Cropland in Iowa." Ph.D. Dissertation. Iowa State Univ., 1979.
3. Beck, M. "Changing Structure of Iowa Farmland Ownership." Ph.D. Dissertation. Iowa State Univ., 1971.
4. Bertelsen, M. K. "Supply Response and the Land Conversion Process in the Rural-Urban Fringe." Ph.D. Dissertation. Va. Poly. Inst., 1978.
5. Bowman, J. D. "Trends in Midwestern Farm Land Values, 1860-1900." Ph.D. Dissertation. Yale Univ., 1965.
6. Britney, J. B. "Time Series Analysis of Factors Affecting the Value of Farm Real Estate, 1911-1959." Ph.D. Dissertation. Purdue Univ., 1964.
7. Chicoine, David L. "Farmland Values in an Urban Fringe: An Analysis of Market Data From Will County, Illinois." Ph.D. Dissertation. Univ. Ill., 1979.

8. Clifton, Ivery D. "Homogeneous Farm Real Estate Market Areas in the U.S.: A Multivariate Investigation with Proposal for Classification and Analysis." Ph.D. Dissertation. Univ. Ill., 1976.
9. Cohan, H. E. "Towards an Operational Theory of the Agricultural Land Market." Ph.D. Dissertation. Univ. Wis., 1970.
10. Cornelius, G. L. "A Study of Residual Income and Land Values on Wisconsin Farms." Ph.D. Dissertation. Univ. Wis., 1961.
11. Crowley, W. D. "The Influence of Net Real Estate Income and Other Property Characteristics on Prices of Agricultural Properties Within and Among Selected Areas of Oregon, 1965-69." Ph.D. Dissertation. Oreg. State Univ., 1972.
12. Edwards, J. D. "Economic Impacts of Roads and Highway Improvement on Farm Real Estate Values in Kansas." Ph.D. Dissertation. Kans. State Univ., 1968.
13. Gilliam, H. C. "An Analysis of the Valuation of Agricultural Land in Cotton Producing Areas of the South Carolina Coastal Plain." Ph.D. Dissertation. Clemson Univ., 1969.
14. Grand, A. M. "Regional Factors Affecting Farmland Values in Illinois." Ph.D. Dissertation. Univ. Ill., 1963.
15. Hampel, W. F., Jr. "A Maximum Bid-Price Model to Evaluate Factors Influencing Farmland Values." Ph.D. Dissertation. Iowa State Univ., 1976.
16. Hartsook, T. E. "Factors Affecting Rural Land Values in the Central Coastal Zone of Oregon." Ph.D. Dissertation. Oreg. State Univ., 1979.
17. Hascall, W. T. "An Economic Analysis of the Rural Land Market in Texas." Ph.D. Dissertation. Tex. A & M Univ., 1978.
18. Hoover, D. M. "A Study of Land Prices in the U.S., 1911-58." Ph.D. Dissertation. Univ. Chicago, 1961.
19. Hrabovszky, J. P. "A Study of Processes Used in Land Purchase Decisions." Ph.D. Dissertation. Cornell Univ., 1965.

20. Jensen, C. W. "The Effects of Urbanization on Agricultural Land Use in Lower Michigan." Ph.D. Dissertation. Mich. State Univ., 1958.
21. Johnson, B. B. "Farmland Leasing as a Means of Resource Control in U.S. Land Based Agriculture." Ph.D. Dissertation. Mich. State Univ., 1975.
22. Justus, F. E. "Agricultural Prices and Costs Suitable for Use in Appraising Farm Land for Long Term Commitments." Ph.D. Dissertation. Univ. Ill., 1955.
23. Larsen, A. "Changes in Land Values in the United States, 1925-62." Ph.D. Dissertation. Mich. State Univ., 1966.
24. Lassiter, R. L., Jr. "An Analysis of the Movements in Agricultural Land Prices and Values in Palm Beach County, Florida, 1940-55." Ph.D. Dissertation. Univ. Fla., 1957.
25. Leistritz, F. L. "Simulation Analysis of the Farm Real Estate Market and Farm Enlargement in Southwest Nebraska." Ph.D. Dissertation. Univ. Neb., 1970.
26. Nelson, T. R. "An Econometric Model of the Land Market Stressing Effects of Government Programs on Land." Ph.D. Dissertation. Okla. State Univ., 1964.
27. Reinsel, R. D. "The Aggregate Real Estate Market: An Evaluation of the Prevailing Hypotheses Explaining the Time Series Trend in U.S. Average Farm Real Estate Values." Ph.D. Dissertation. Mich. State Univ., 1973.
28. Reynolds, J. E. "An Econometric Investigation of Farmland Values in the United States." Ph.D. Dissertation. Iowa State Univ., 1966.
29. Riew, J. H. "Forty Years of Property Values in Wisconsin." Ph.D. Dissertation. Univ. Wis., 1960.
30. Ronnau, R. M. "An Economic Analysis of the Dynamic Land Market System in the Edwards Plateau of Texas." Ph.D. Dissertation. Tex. A & M Univ., 1976.
31. Shalit, H. "Analysis of Increasing Farmland Values." Ph.D. Dissertation. Univ. Calif. (Davis), 1978.



32. Sutton, T. P. "Temporal Stability of the Effects of Factors Causing Intertract Variations in Farm Real Estate Prices in Kansas." Ph.D. Dissertation. Kans. State Univ., 1970.
33. Thomas, R. W., Jr. "Land and Its Resources in a General Demand Structure." Ph.D. Dissertation. Iowa State Univ., 1962.
34. Tsui, T. T. "Forecasting Methodology and Its Application to Land Price Forecasts." Ph.D. Dissertation. Univ. Ill., 1961.
35. Van Vuuren, W. "Agricultural Land Prices and Returns in an Advanced Urban and Industrial Economy." Ph.D. Dissertation. Univ. Calif. (Berk.), 1968.
36. Waldrop, J. E. "Effects of Upstream Watershed Development Upon Prices and Values of Affected Farmland in Selected Areas of Oklahoma." Ph.D. Dissertation. Okla. State Univ., 1965.
37. Walker, L. A. "The Determination and Analysis of Iowa Land Values." Ph.D. Dissertation. Iowa State Univ., 1976.
38. Winter, E. P. "The Effects of the Relocation of a Cross-Country Highway on Land Values, Land Transfers, and Land Uses." Ph.D. Dissertation. Univ. Wis., 1954.

#### M.S. Theses

1. Bond, L. K. "Farm Rental Arrangements on Irrigated Farms in Arizona." M.S. Thesis. Univ. Ariz., 1962.
2. Boxley, R. F., Jr. "The Effect of Price Support Programs for Peanuts on Farm Land Values." M.S. Thesis. Va. Poly. Inst., 1963.
3. Brost, Christy G. "Analysis of the Buyers Side of the Land Market in Nebraska." M.S. Thesis. Univ. Neb., 1959.
4. Capstick, D. F. "A Study of Farm Land Inventory Values for Accounting Purposes in Garfield County, Oklahoma, 1929-1950." M.S. Thesis. Okla. State Univ., 1953.
5. Cherry, R. C., Jr. "An Economic Analysis of Investment in Agricultural Land." M.S. Thesis. Tex. A & M Univ., 1966.

6. Cranford, T. E. "The Farm Real Estate Market in Natchitoches Parish." M.S. Thesis. La. State Univ., 1955.
7. Dover, H. J. "Factors Affecting the Value of Rural Property in Northern Georgia." M.S. Thesis. Univ. Ga., 1970.
8. Edwards, John A. "Analysis of Land Prices and Causal Factors With Specific Reference to Lancaster County, Nebraska, 1919-1950." M.S. Thesis. Univ. Neb., 1952.
9. Finch, H. L., Jr. "Capitalization of Benefits of Flue Cured Tobacco Price Support Program into Farm Land Value." M.S. Thesis. Va. Poly. Inst., 1964.
10. Forrest, E. W. "Location Factors Affecting Land Prices in Grady County, Oklahoma, 1941-1945." M.S. Thesis. Okla. State Univ., 1951.
11. Gordon, Maurice A. "Factors Affecting Farmland Values: A Study of Champaign and Douglas Counties in Illinois." M.S. Thesis. Univ. Ill., 1979.
12. Jennings, R. J., Jr. "An Analysis of the Agricultural Land Market in North Central Oklahoma." M.S. Thesis. Okla. State Univ., 1977.
13. Kensil, David R. "A Study of the Farmland Market in Ten Western Illinois Counties, 1975." M.S. Thesis. Univ. Ill., 1977.
14. Klinefelter, D. A. "An Economic Investigation of the Factors Affecting Farmland Values in Illinois." M.S. Thesis. Univ. Ill., 1971.
15. Knapp, J. A. "Colorado Rural Land Markets: 1973." M.S. Thesis. Colo. State Univ., 1975.
16. Kristensen, J. "Reliability of Land Market Sampling Techniques, Payne and Grady Counties, Oklahoma, 1941-1949." M.S. Thesis. Okla. State Univ., 1951.
17. Kuhlman, R. H. "An Econometric Study of Factors Affecting Farm Land Prices." M.S. Thesis. Okla. State Univ., 1979.
18. Lawrence, J. D. "The Effect of Increasing Farm Size on Land Values." M.S. Thesis. Mont. State College, 1958.

19. Lewis, C. M. "Factors Associated With Variations in Farm Real Estate Valuation in New York State." M.S. Thesis. Cornell Univ., 1959.
20. Lindsay, B. E. "The Influence of Selected Variables on Land Values in the Rural-Urban Interface." M.S. Thesis. Univ. Mass., 1973.
21. Mounger, C. D., Jr. "Statistical Analysis of Farm Land Values in Jefferson County, Tennessee." M.S. Thesis. Univ. Tenn., 1960.
22. Nagle, G. "Characteristics of the New Jersey Farm Real Estate Market 1966-70." M.S. Thesis. Rutgers-N.J. State Univ., 1973.
23. Northcraft, C. "The Resource Land Market: An Analysis of Market Sales in Hunterdon County, New Jersey." M.S. Thesis. Rutgers-N.J. State Univ., 1979.
24. Perras, D. J. "Real Estate Costs on New York Farms." M.S. Thesis. Cornell Univ., 1958.
25. Reynolds, J. E. "Financial Experiences With Land Contracts in Iowa." M.S. Thesis. Iowa State Univ., 1963.
26. Scharlach, W. C. "A Cross-Sectional Analysis of Indiana Land Values, 1959." M.S. Thesis. Purdue Univ., 1961.
27. Sheffield, A. R. "An Analysis of the Farmland Market in Georgia." M.S. Thesis. Univ. Ga., 1977.
28. Starks, K. W. "An Analysis of Land Ownership Patterns in Oklahoma to Project Future Farm Real Estate Transfers and Financial Needs." M.S. Thesis. Okla. State Univ., 1978.
29. Stevens, I. M. "An Economic Appraisal of Methods Used in Marketing Wyoming Range." M.S. Thesis. Univ. Wyo., 1953.
30. Steward, B. H. "An Analysis of the Farm Real Estate Market in Beckham and Garfield Counties, Oklahoma." M.S. Thesis. Okla. State Univ., 1958.
31. Sutherland, G. W. "An Analysis of the Impact of Farm Product Prices and Reservoir Developments on the Price of Farm Land in Georgia." M.S. Thesis. Univ. Ga., 1966.



32. Tabb, J. R. "Land Value Reports by Real Estate Brokers in Iowa, 1941-50." M.S. Thesis. Iowa State Univ., 1951.
  33. Tower, D. L. "Rural Land Prices: An Empirical Analysis in East Central Florida." M.S. Thesis. Univ. Fla., 1978.
  34. Tracy, John S. "Decision Making in the Farmland Market." M.S. Thesis. Univ. Ill., 1973.
  35. Tripple, Harvey D. "Relationship Between Sale Price and Assessed Values of Farmland in Nebraska, 1930-60." M.S. Thesis. Univ. Neb., 1963.
  36. Tseng, R. H. "A Cross Sectional Analysis of Farmland Values in Florida." M.S. Thesis. Univ. Fla., 1969.
  37. Walker, K. W., Jr. "Factors Affecting the Value of Rural Property in Southwest Georgia." M.S. Thesis. Univ. Ga., 1974.
  38. Wennmacher, Arnold G. "Farm Real Estate Values in Three Selected Areas in Illinois, 1954-58." M.S. Thesis. Univ. Ill., 1961.
  39. Wickes, H. E., Jr. "Enumeration Costs of Land Market Surveys, Oklahoma, 1941-1952." M.S. Thesis. Okla. State Univ., 1954.
  40. Winter, J. R. "An Economic Analysis of Land Prices of Mountainous Grazing Land in Eastern Oregon." M.S. Thesis. Oreg. State Univ., 1979.
  41. Wood, D. L. "Land Prices as Affected by Location, Jackson County, Oklahoma." M.S. Thesis. Okla. State Univ., 1950.
  42. Wyatt, D. F. "Factors Affecting Farmland Values in Florida and the Southeast." M.S. Thesis. Univ. Fla., 1971.
- 
1. Pope, R. D. "Structural Change in California Agricultural Production" Univ. Calif., Davis, Calif. Period: 5-17-77 to 6-30-80. Objectives: Explains land prices and rates of change in land prices in California; tests hypotheses regarding the effects of taxes, farm size, urban encroachment, relative farm prices, rate of inflation, government investments, subsidies and regulation, risk, concentration of landholdings, and

Ongoing Current  
Research Infor-  
mation System  
(CRIS) Projects

nonfarming sector land acquisitions on California land prices and rates of change of land prices; analyzes various existing and proposed land policies in light of their impacts via the market model.

Completed Current  
Research Infor-  
mation System  
(CRIS) Projects

1. Pine, W. H. "Farm Real Estate Markets and Prices in Kansas" Kansas State Univ., Manhattan, Kans. Period: 7-1-70 to 6-30-79 Objectives: Provided information on prices and price trends for farm real estate in parts of Kansas; and determined and measured factors affecting trends and factors causing differences in values of tracts as well as who was buying and selling, their reasons, and influences on prices.

MACHINERY AND  
BUILDINGS

Books

1. Diesslin, Howard Gustaf. Agricultural Equipment Financing. New York, N.Y.: (Natn'l), Bur. Econ. Res. 1955.
2. Johnson, W. H., and B. J. Lamp, Principles, Equipment, and Systems for Corn Harvesting. Westport, Conn.: AVI Pub. Inc., 1966.
3. Kudrle, R. T. Agricultural Tractors: A World Industry Study. Cambridge, Mass.: Ballinger Pub., 1975.
4. Phillips, William Gregory. The Agricultural Implement Industry. Toronto, Ontario, Canada: Univ. Toronto Press, 1956.
5. Whitaker. Agricultural Buildings and Structures. Englewood Cliffs, N.J.: Prentice Hall Inc., Reston Pub., 1979.

Journals

1. Barber, C. L. "The Farm Machinery Industry: Reconciling the Interest of the Farmer, the Industry, and the General Public," American Journal of Agricultural Economics, Vol. 55, No. 5, (Dec. 1973), pp. 820-28.
2. Bates, J. M., A. J. Rayner, and P. R. Custance. "Inflation and Farm Tractor Replacement in the U.S.: A Simulation Model," American Journal of Agricultural Economics, Vol. 61, No. 2 (May 1979), pp. 331-34.
3. Brown, F. W. "Patterns of Buying Farm Equipment and Supplies of Indiana," Journal of Marketing, Vol. 15 (July 1950), pp. 70-73.

4. Chisholm, A. H. "Effects of Tax Depreciation Policy and Investment Incentives on Optimal Equipment Replacement Decisions: Reply," American Journal of Agricultural Economics, Vol. 58, No. 2 (May 1976), pp. 359-60.
5. Conant, M. "Competition in the Farm Machinery Industry," Journal of Business, Vol. 26 (Jan. 1953), pp. 26-36.
6. Copithorne, L. W. "The Pattern of International Trade in Farm Machinery," Canadian Journal of Agricultural Economics, Vol. 22, No. 1 (Feb. 1974), pp. 42-57.
7. Cromarty, W. A. "The Farm Demand for Tractors, Machinery and Trucks," Journal of Farm Economics, Vol. 41, No. 2 (May 1959), pp. 323-31.
8. Erlich, D. "Economic Problems of Developing Machines for Cotton Production," Problems of Economics, Vol. 1, No. 3 (July 1958), pp. 23-26.
9. Fettig, L. P. "Adjusting Farm Tractor Prices for Quality Change, 1950-1962," Journal of Farm Economics, Vol. 44, No. 5 (Dec. 1962), pp. 1763-72.
10. Hamlin, E. T., and Van E. Eitel. "Manufacture Financing of Farm Machinery Sales, 1963-1967," Agricultural Finance Review, Vol. 29, (Feb. 1969), pp. 34-40.
11. Hill, L., and P. Kau. "Application of Multivariate Profit to a Threshold Model of Grain Dryer Purchasing Decisions," American Journal of Agricultural Economics, Vol. 55, No. 1 (Feb. 1973), pp. 19-27.
12. Irwin, G. D., and L. N. Smith. "Farm Machinery Leasing: Perspective and Prospects," Agricultural Finance Review, Vol. 33 (July 1972), pp. 42-47.
13. Jain, B. K. S. "Bottlenecks in Farm Equipment Industry," Agriculture and Agro-Industries Journal, Vol. 5, No. 6 (June 1972), pp. 3-7.
14. Kay, R. D., and E. Rister. "Effects of Tax Depreciation Policy and Investment Incentives on Optimal Equipment Replacement Decisions: Comment," American Journal of Agricultural Economics, Vol. 58, No. 2 (May 1976), pp. 355-58.
15. Kohls, R. L., R. L. Stucky, J. I. Gifford. "Farmers Selection of Farm Machinery Dealers in a Central Indiana County." Journal of Marketing Research, Vol. 22, (Apr. 1957), pp. 446-50.



16. Kramer, H. M. "Harvesters and High Finance: Formation of the International Harvester Company." Business History Review, Vol. 38, No. 3 (Sept. 1964), pp. 283-301.
17. Lerner, E. M. "Investment Uncertainty During the Civil War: A Note On the McCormick Brothers (Manufacturers of Farm Machinery)," Journal of Economic History, Vol. 16, No. 1 (Mar. 1956), pp. 34-40.
18. McNeill, R. C. "Depreciation of Farm Tractors in British Columbia," Canadian Journal of Agricultural Economics, Vol. 27, No. 1 (Feb. 1979), pp. 53-58.
19. Omanovsky, A. "Types, Organization and Location of Enterprises for Repair of Agricultural Machines," Problems of Economics, Vol. 1, No. 5 (Sept. 1958), pp. 24-27.
20. Pakhomov, A. "Problems of Lowering Production Costs in Machine-Tractor Stations," Problems of Economics, Vol. 1, No. 2 (June 1958), pp. 23-28.
21. Phillips, W. G. "The Changing Structure of Markets for Farm Machinery," Journal of Farm Economics, Vol. 40, No. 5 (Dec. 1958), pp. 1172-85.
22. Rayner, O. J., and K. Cowling. "Demand for Farm Tractors in the United States and the United Kingdom," American Journal of Agricultural Economics, Vol. 50, No. 4 (Nov. 1968), pp. 896-912.
23. Rodewald, G. E., and R. J. Folwell. "Farm Size and Tractor Technology," Agricultural Economics Research, Vol. 29, No. 3 (July 1977), pp. 82-89.
24. Scott, J., and E. O. Heady. "Regional Demand for Farm Buildings in the United States," Journal of Farm Economics, Vol. 49, No. 1 (Feb. 1967), pp. 184-98.
25. Semenov, V. N. "Technical Progress and the Problem of Dual Prices for Agricultural Machinery," Problems of Economics, Vol. 19, No. 3 (July 1976), pp. 63-79.
26. Slater, G. R. "The Relative Market Power of Farm Machinery Manufacturers," Journal of Farm Economics, Vol. 42, No. 5 (Dec. 1960), pp. 1252-55.

27. U.S. Department of Agriculture. "Financing Farm Machinery Purchases of Farmers by Manufacturers, 1963-65," Agricultural Finance Review, Vol. 27 (Oct. 1966), pp. 61-62.
28. Wick, R. M. "Henry Ford's Tractors and American Agriculture," Agricultural History, Vol. 38 (Apr. 1964), pp. 79-86.

U.S. Department  
of Agriculture

1. Biser, L. C. Farm Machinery Operation, 14 Selected Cooperatives. SR-133. U.S. Dept. Agr., Farmer Coop. Serv., May 1973.
2. Fox, A. Demand for Farm Tractors in the United States. AER-103. U.S. Dept. Agr., Econ. Stat. Coop. Serv., Nov. 1966.
3. Nelson, P. E. The Farm Machinery and Equipment Industry: Its Changing Structure and Performance. U.S. Dept. Agr., Agr. Mktg. Serv., Marketing Research Report No. 892, Aug. 1970.
4. Parsons, M. S., F. H. Robinson, P. E. Strickler. Farm Machinery: Use, Depreciation, and Replacement. SB-269. U.S. Dept. Agr., Agr. Res. Serv., Oct. 1960.
5. Southard, L. Building and Fencing Materials: Prices, Margins, and Marketing Practices. ESCS-21. U.S. Dept. Agr., Econ. Stat. Coop. Serv., July 1978.
6. \_\_\_\_\_. Farm Equipment Prices, Margins, and Related Marketing Costs. ESCS-28. U.S. Dept. Agr., Econ. Stat. Coop. Serv., Oct. 1978.
7. Strickler, P. E., and H. W. Smith. Farm Machinery and Equipment, Number and Value of Shipments for Domestic Use, 1935-39 to 1966. SB-419. U.S. Dept. Agr., Econ. Res. Serv., Mar. 1968.
8. U.S. Department of Agriculture, Economic Research Service. Power and Equipment on Farms, 1964-48 States Major Items by Size and Type. SB-457, Aug. 1970.

Experiment Stations

1. Anthony, F., O. A. Kummel, and B. K. Bristol. The On-Farm Service Center in Mechanized Farming. Pa. Agr. Exp. Sta., Bull. 728, Dec. 1965.

2. Byers, G. B., and K. L. Wade. Estimating Comparative Cost of Custom Hiring, Renting, Leasing, or Owning of Selected Farm Machines. Ky. Agr. Exp. Sta., RR-6, June 1970.
3. Cromarty, W. A. The Market for Farm Trucks. Mich. Agr. Exp. Sta., Tech. Bull. 271, May 1959.
4. \_\_\_\_\_. The Demand for Farm Machinery and Tractors. Mich. Agr. Exp. Sta., Tech. Bull. 275, Nov. 1959.
5. Dau, P. K. Y. Demand for On-Farm, Heated Air Grain Dryers. Ill. Agr. Exp. Sta., AERR-118, Jan. 1973.
6. Doss, H. J. A Study of Farm Machinery Use in Michigan. Mich. Agr. Exp. Sta., Res. Rep. 219, Sept. 1973.
7. Fliginger, C. J. Farm Equipment Retailing in South Dakota. S. Dak. Agr. Exp. Sta., Agr. Econ., Pam. 74, July 1956.
8. Folwell, R. J. Farm Machinery and Implement Dealerships in Pacific Northwest. Wash. Agr. Exp. Sta., Circ. 562, Mar. 1973.
9. Glass, M. R., and A. J. Ortego. Virginia's Retail Farm Equipment Businesses: Variation in Financial Statements and an Analysis of Factors Affecting Profits. Va. Agr. Exp. Sta., Tech. Bull. 168, Feb. 1964.
10. Greer, S. C. Changes in Farm Size and Machinery Ownership: The Triangle Area of Montana, 1973-76. With a Comparison to 1967, Mont. State Univ., Res. Rep. 116, Dec. 1977.
11. Heady, E. O., and J. T. Scott. Aggregate Investment Demand for Farm Buildings: A National, Regional, and State Time Series Analysis. Iowa Agr. Exp. Sta., Res. Bull. 545, July 1966.
12. Kletke, D. D., and L. G. Tweeten. Costs and Replacement Procedures for Farm Tractors. Okla. Agr. Exp. Sta., B-687, Nov. 1970.
13. Malphrus, L., and L. Boyleston. Feed Mill Costs and Capital Requirements in South Carolina. Clemson Univ. Agr. Exp. Sta., Bull. 606, Dec. 1977.
14. Nordbo, T. H., L. Schaffner, and S. Strangeland. Decision-Making Processes in Farm Machinery Selections. N. Dak. Agr. Exp. Sta., Bull. 410, June 1957.



15. Overly, F. Industrial Development for Rural Communities: Assessing A Farm Implement Assembly Plant. Kans. Agr. Exp. Sta., Circ. 439, May 1971.
16. Peacock, D. L., and J. R. Brake. What is Used Farm Machinery Worth? Mich. Agr. Exp. Sta., Res. Rep. 109, Mar. 1970.
17. Peterson, R. D., and D. C. Dahl. Markets for Purchased Farm Inputs In the Western Region: Fee, Fertilizer, Farm Machinery. Colo. State Univ. Exp. Sta., Bull. 560S, Sept. 1974.
18. Pine, W. H., W. W. Owen, and L. D. Loftsgard. Economics of Leasing Farm Machinery and Buildings. N. Dak. Agr. Exp. Sta., Bull. 450, Jan. 1964.
19. Umberger, D. E., N. K. Whittlesey, M. E. Wirth. Machinery Investment Practices of Washington Farmers. Wash. Agr. Exp. Sta., Bull. 737, Aug. 1971.
20. White, R. G., H. F. McColley, D. W. Sturt. Farm Machinery and Farm Labor: Project 80, Rural Michigan Now and In 1980. Mich. Agr. Exp. Sta., Res. Rep. 48, June 1966.
21. Williamson, P. S. Leasing or Renting Versus Ownership of Farm Equipment. S.C. Agr. Exp. Sta., AE-349, May 1972.
22. Woolf, W. F., A. R. Gerlow, J. C. Larrison. Farm Machinery and Equipment Costs in the Southwest Louisiana Rice Area. La. Agr. Exp. Sta., D.A.E. Res. Rep. 449, Dec. 1972.
23. Wright, K. T. Purchases of Major Farm Machinery. Mich. Agr. Exp. Sta., Res. Rep. Bus. 3, Dec. 1963.
24. \_\_\_\_\_, and W. H. Vincenti. Intended and Actual Tractor Purchases by Farmers in Michigan, 1959. Mich. Agr. Exp. Sta., QB 44(2), Nov. 1961, pp. 334-60.

Ph.D. Dissertations

1. Cameron, Donald Oscar. "An Analysis of Direct Investment with Special Reference to the Agricultural Equipment Industry." Ph.D. Dissertation. N.Y. Univ. Graduate School, 1963.
2. Christensen, Rondo A. "A Business Management Study of 73 Retail Farm Equipment Firms, New York, 1955." Ph.D. Dissertation. Cornell Univ., 1957.

3. Coleman, Raymond James. "Relationship of Executive Characteristics and Growth Factors of Kansas Farm Equipment Manufacturers." Ph.D. Dissertation. Univ. Ark., 1967.
4. Eckles, Elvis Luverne. "The Development of Oligopoly in the Farm Implement Industry." Ph.D. Dissertation. Univ. Ill., 1953.
5. Fettig, Lyle P. "Price Indexes for New Farm Tractors in the Postwar Period." Ph.D. Dissertation. Univ. Chicago, 1963.
6. Lee, K. W. "Multivariate Analysis and Geographical Comparison of the Demand for Grain Dryers in Four Midwestern States." Ph.D. Dissertation. Univ. Ill., 1973.
7. Linnenan, Robert Ernst. "The United States Tractor Industry in Selected Foreign Markets." Ph.D. Dissertation. Univ. Ill., 1965.
8. McClatchy, D. "Combines in the Corn Belt: A Normative Study of Regional Farm Machinery Demand." Ph.D. Dissertation. Purdue Univ., 1973.
9. Marks, Leonard, Jr. "Sales Financing Problems of Farm Equipment Manufacturers." Ph.D. Dissertation. Harvard Univ., 1961.
10. Melicher, Arlyn John. "Collective Bargaining in the Agricultural Implement Industry: Impact of Company and Union Structures in Three Firms." Ph.D. Dissertation. Univ. Chicago, 1964.
11. Minden, Arlo James. "Domestic Demand Functions for New Farm Machinery." Ph.D. Dissertation. Iowa State Univ., 1965.
12. Murphy, James Theodore. "Investment in the Farm Implement Industry." Ph.D. Dissertation. Iowa State Univ., 1962.
13. Paul, D. "Costs and Economics of Scale in Input Marketing Firms With Special Reference to California Retail Farm Machinery Dealerships." Univ. Calif. (Davis), 1976.
14. Scott, John Tackeray, Jr. "The Demand for Investment in Farm Buildings." Ph.D. Dissertation. Iowa State Univ., 1965.

15. Singh, A. K. "Farm Machinery Merchandising: Farmer and Dealer Preferences Concerning Used Equipment Guarantees, Farm Service Centers and Information Services." Ph.D. Dissertation. Oregon State Univ., 1971.
16. Thomas, Norman Francis. "Minneapolis-Moline: A History of Its Formation and Operations." Ph.D. Dissertation. Univ. Minn., 1954.

M.S. Theses

1. Allen, John Wesley. "A Study of Accounting Practices of Retail Farm Equipment Firms, New York, 1957." M.S. Thesis. Cornell Univ., 1959.
2. Baker, G. B. "Grain Drying in Country Elevators: Costs and Economics of Size." M.S. Thesis. Univ. Neb., 1972.
3. Bain, S. C., Jr. "The Farmer's Equipment Investment Analysis Problem: A Case Study." M.S. Thesis. Cornell Univ., 1973.
4. Benjamin, Gary Lee. "An Economic Analysis of Alternative Means of Acquiring Farm Machinery Services for Southern Michigan Cash-Grain Farms." M.S. Thesis. Mich. State Univ., 1968.
5. Boyko, K. "Cost Structure of Farm Machinery Implement Dealerships in the Wheat-Pea Area of the Pacific Northwest." M.S. Thesis. Wash. State Univ., 1974.
6. Choate, Leo E. "Farm Machinery Thesis." M.S. Thesis. Univ. Idaho, 1954.
7. Clay, Kendall Owen. "Optimum Size, Number of Locations of Virginia Retail Farm Equipment Dealerships." M.S. Thesis. Va. Poly. Inst., 1968.
8. Coon, R. C. "An Economic Analysis of Hay Harvesting Systems in North Dakota." M.S. Thesis. N. Dak. State Univ., May 1974.
9. Cooper, James R. "Toward a More Efficient Farm Machinery Industry." M.S. Thesis. Mich. State Univ., 1968.
10. Curvey, Bernard Allen. "A Study of Machinery Investment and Machinery Cost on New York State Dairy Farms." M.S. Thesis. Cornell Univ., 1960.



11. Darley, Richard Dean. "Investment in and Use of Farm Machinery in Missouri." M.S. Thesis. Univ. Mo., 1952.
12. Ehler, DeWayne. "Employment Stabilization in the Farm Equipment Industry." M.S. Thesis. Iowa State Univ., 1957.
13. Eiler, Doyle Alden. "An Economic Analysis of the Short-Run Demand for Timeliness With Special Reference to Farm Machinery Parts." M.S. Thesis. Oreg. State Univ., 1971.
14. Elliott, Michael J. "The Market Structure of the North Dakota Farm Machinery Retailing Industry." M.S. Thesis. N. Dak. State Univ., 1970.
15. Fehr, A. J., Jr. "Costs of Owning and Operating Power Units and Machinery on Dryland Farms in Wyoming." M.S. Thesis. Univ. of Wyo., 1962.
16. Flinginger, C. John. "Farm Equipment Retailing in South Dakota." M.S. Thesis. S. Dak. State Univ., 1956.
17. Glass, Max Rolfe. "An Analysis of Financial Statements of Virginia's Retail Farm Equipment Business." M.S. Thesis. Va. Poly. Inst., 1962.
18. Greene, Ted Whitney. "A Study of Machinery Investment and Expenses on New York Dairy Farms." M.S. Thesis. Cornell Univ., 1958.
19. Hartman, F. M. "Hay Harvesting Costs in Colorado." M.S. Thesis. Colo. State Univ., 1971.
20. Hofland, D. D. "Economics of Large Horsepower Machinery Systems." M.S. Thesis. N. Dak. State Univ., 1973.
21. Huffman, Donald C. "Machinery Investment and Use." M.S. Thesis. Univ. Mo., 1960.
22. Hughes, D. W. "Net Investment in Physical Assets in the Farming Sector: A Case Study of Tractors." M.S. Thesis. Purdue Univ., 1975.
23. Jose, Henry Douglas. "The Economic Effect of Rainfall Variability on Forage Machine Selection." M.S. Thesis. Univ. Mass., 1970.

24. Kerns, Waldon Ray. "An Analysis of Variation in Gross Margins for New Used Farm Equipment Sales in Virginia." M.S. Thesis. Va. Poly. Inst., 1967.
25. Marable, U., Jr. "Current Farm Machinery Cost for Row Crop Enterprises on Different Farm Sizes in the Coastal Plain Area of Georgia." M.S. Thesis. Univ. Ga., 1975.
26. Megehee, J. "The Economics of Owning Versus Leasing Farm Tractors in the Delta Area of Mississippi." M.S. Thesis. Miss. State Univ., May 1972.
27. Mueller, R. "Farm Machinery Management for Missouri Farms and a Machinery Investment Analysis of 99 Selected Missouri Main In-Record Farms." M.S. Thesis. Univ. Mo., 1973.
28. Nigh, J. A. "Evaluation of the Least Acquisition Cost of Farm Machinery." M.S. Thesis. Univ. Neb., 1971.
29. Nordbo, Marvin J. "Decision-Making Process Relating to Farm Machinery Investments." M.S. Thesis. N. Dak. State Univ., 1957.
30. Peacock, D. L. "An Economic Analysis of Used Farm Machinery Values." M.S. Thesis. Mich. State Univ., 1967.
31. Read, F. H., Jr. "Cost of On-Farm Drying and Storage of Grain in Mississippi." M.S. Thesis. Miss. State Univ., 1970.
32. Saffell, Martin. "An Analysis of Future Demand for Grain Storage and Drying Equipment in Illinois and Iowa." M.S. Thesis. Univ. Ill., 1979.
33. Storey, David, A. "Farmers' Machinery Purchasing Decisions." M.S. Thesis. Purdue Univ., 1958.
34. Stuart, P. J. "An Evaluation of the Farm Machinery Market in Utah." M.S. Thesis. Utah State Univ., 1973.
35. Sutton, J. W. "An Economic Analysis of Financial Policies and Constraints Common to Retail Farm Machinery Dealers in Texas." M.S. Thesis. Tex. A & M Univ., 1974.
36. Thomas, Larry C. "Analysis of Machinery Purchases on Illinois Grain Farms." M.S. Thesis. Univ. Ill., 1973.

37. Usman, D. "Costs and Returns for On-Farm Rice Drying-Storage Facilities in Mississippi in 1973." M.S. Thesis. Miss. State Univ., 1975.
38. Wilson, Dale W. "Investments in and Costs of Using Machinery." M.S. Thesis. Univ. Mo., 1960.

Completed Current  
Research Infor-  
mation System  
(CRIS) Projects

1. Kletke, D. D. "Optimal Inventory and Replacement Patterns for Farm Machinery." Okla. State Univ., Stillwater, Okla. Period: 7-1-70 to 6-30-77. Objectives: Determine optimal ownership intervals for implements under considerable yearly cost variability; determine optimal machinery complements for any farm; analyze effects of changes in interest rates, labor charges, and farm size on optimal machinery complements; and develop a computer program capable of outlining for individual farms the procedure for going from the current farm machinery inventory to the optimal farm machinery inventory.
2. Daves, T. E. "The Economics of Machinery Ownership and Use on Northern Great Plains, Farms." S. Dak. State Univ., Brookings, S. Dak. Period: 7-1-76 to 6-30-78. Objectives: Identify optimum machinery complements for various sizes and types of farms in South Dakota; and compare optimum complements of changing input-output ratios.

PESTICIDES

Books

1. Berg, G. L. (ed.) Farm Chemicals Handbook-1979. Willoughby, Ohio: Meister Pub. Co., 1979.
2. Fairchild, E. J. (ed.) Agricultural and Chemical Pesticides. Philadelphia, Pa.: Int'l. Ideas, 1978.
3. Wei, J., and others. The Structure of the Chemical Processing Industries: Functions and Economics. New York, N.Y.: McGraw-Hill Book Co., 1978.

Journals

1. Campbell, H. F. "Estimating the Marginal Productivity of Agricultural Pesticides: The Care of Tree-Fruit Farms in the Okanagan Valley," Canadian Journal of Agricultural Economics, Vol. 24, No. 2 (July 1976), pp. 23-30.



2. Carlson, W. "The Law and the Use of Pesticides," Illinois Agricultural Economics, Vol. 8, No. 2 (July 1968), pp. 9-16.
3. Dixon, O. "Insecticide Requirements in an Efficient Agricultural Sector," Review of Economics and Statistics, Vol. 55, No. 4 (Nov. 1973), 423-32.
4. Headley, J. C. "Estimating the Productivity of Agricultural Pesticides," American Journal of Agricultural Economics, Vol. 50, No. 1 (Feb. 1968), pp. 13-23.
5. Lacewell, R. D., and W. R. Masch. "Economic Incentives to Reduce the Quantity of Chemicals Used in Commercial Agriculture," Southern Journal of Agricultural Economics, Vol. 4, No. 1 (July 1972), pp. 203-08.
6. Longham, M. R., and W. F. Edwards. "Externalities in Pesticide Use," American Journal of Agricultural Economics, Vol. 51, No. 5 (Dec. 1969), pp. 1172-77.
7. Longworth, J. W., and D. Rudd. "Plant Pesticide Economics With Special Reference to Cotton Insecticides," Australian Journal of Agricultural Economics, Vol. 19, No. 3 (Dec. 1975), pp. 210-27.
8. Talpaz, H., and I. Borosh. "Strategy for Pesticide Use: Frequency and Applications," American Journal of Agricultural Economics, Vol. 56, No. 4 (Nov. 1974), pp. 769-75.

U.S. Department  
of Agriculture

1. Andrienas, P., T. Eichers, and A. Fox. Farm Expenditures for Pesticides in 1964. AER-106. U.S. Dept. Agr., Econ. Res. Serv., Jan. 1967.
2. Andrienas, P. A., and T. Eichers. Evaluation of Pesticide Supplies and Demand for 1974-76. AER-300. U.S. Dept. Agr., Econ. Res. Serv., July 1975.
3. \_\_\_\_\_. Evaluation of Pesticide Supply and Demand for 1976. AER-332. U.S. Dept. Agr., Econ. Res. Serv., Apr. 1976.
4. \_\_\_\_\_. Evaluation of Pesticide Supplies and Demand for 1977. AER-366. U.S. Dept. Agr., Econ. Res. Serv., Feb. 1977.

5. Blake, H. T., and P. A. Andrienas. Farmers Use of Pesticides in 1971, Expenditures. AER-296. U.S. Dept. Agr., Econ. Res. Serv., Nov. 1975.
6. Eichers, T. R. Liquid Pesticide Formulation and Distribution by Two Southern Cooperatives. GR-126. U.S. Dept. Agr., Farmer Coop. Serv., GR-126, July 1965.
7. \_\_\_\_\_, R. Jenkins, and A. Fox. DDT Used in Farm Production. AER-158. U.S. Dept. Agr., Econ. Res. Serv., Apr. 1969.
8. \_\_\_\_\_, and others. Quantities of Pesticides Used by Farmers in 1964. AER-131. U.S. Dept. Agr., Econ. Res. Serv., Jan. 1968.
9. \_\_\_\_\_, and P. A. Andrienas. Evaluation of Pesticide Supplies and Demand for 1978. AER-399. U.S. Dept. Agr., Econ. Stat. Coop. Serv., Mar. 1978.
10. \_\_\_\_\_. Evaluation of Pesticide Supplies and Demand for 1979. AER-422. U.S. Dept. Agr., Econ. Stat. Coop. Serv., Apr. 1979.
11. Ferguson, W. L. Farmers' Expenditures for Custom Pesticide Services, 1971. AER-314. U.S. Dept. Agr., Econ. Res. Serv., Nov. 1975.
12. Fox, A., and others. Extent of Farm Pesticide Use on Crops in 1966. AER-147. U.S. Dept. Agr., Econ. Res. Serv., Oct. 1968.
13. Gale, J. F., P. Andrienas, and A. Fox. Farmers' Pesticide Expenditures for Crops, Livestock and Other Selected Uses in 1964. AER-145. U.S. Dept. Agr., Econ. Res. Serv., Oct. 1968.
14. Jenkins, R., and others. Farmers' Expenditures for Custom Applications in 1964. AER-146. U.S. Dept. Agr., Econ. Res. Serv., Oct. 1969.
15. \_\_\_\_\_. Pesticide Application Equipment Owned by Farmers, 48 States. AER-161. U.S. Dept. Agr., Econ. Res. Serv., May, 1969.
16. Langsford, E. L. Extent and Cost of Using Chemicals in Cotton Production, Selected Areas, 1961. ERS-155. U.S. Dept. Agr., Econ. Res. Serv., Mar. 1964.

17. Strickler, P. E., and W. C. Hinson. Extent of Spraying and Dusting on Farms, 1958 - With Comparisons. SB-314. U.S. Dept. Agr., Agr. Res. Serv., May 1962.
18. U.S. Department of Agriculture, Economic Research Service. Economic Impact of Discontinuing Farm Use of Chlordane. AER-231. Aug. 1972.
19. \_\_\_\_\_, Economic Research Service. Extent and Cost of Weed Control with Herbicides and an Evaluation of Important Weeds, 1968. ARS-H-1. Nov. 1972.
20. \_\_\_\_\_, Economic Research Service. Economic Impact of Discontinuing Farm Use of Heptachlor. ERS-509. Jan. 1973.
21. \_\_\_\_\_, Economic Research Service. The Economic Impact of Cancelling the Use of 2,4,5-T in Rice Production. ERS-510. Mar. 1973.
22. \_\_\_\_\_, Economic Research Service. Economic Impact of Discontinuing Aldrin Use in Corn Production. ERS-557. June 1974.

#### Experiment Stations

1. Badenkop, M. B., and T. K. Hunter. Vitalization of Pesticides by Tennessee Vegetable Growers. Tenn. Agr. Exp. Sta. Bull. 449, Nov. 1968.
2. Beal, G. M., J. M. Bohlen, and W. A. Fleischman. Behavioral Studies Related to Pesticides: Agricultural Chemicals and Iowa Agricultural Chemical Dealers. Iowa Agr. & Home Econ. Exp. Sta. Bull. P-139, Oct. 1969.
3. Delro, H. W., and D. O. Anderson. Herbicide Use in Selected Counties in North Dakota, Minnesota and South Dakota 1964 and 1966. N. Dak. Agr. Exp. Sta. Agr. Econ. Stat. Ser. 3, Oct. 1969.
4. Greene, C. H. The New Mexico Pesticide Industry: Custom Applicators. N. Mex. Agr. Exp. Sta. Bull. 533, Aug. 1968.
5. \_\_\_\_\_. Marketing Practices and Problems of Pesticide Dealers. N. Mex. Agr. Exp. Sta. Bull. 524, Apr. 1967.
6. Jemstedt, M. L., and D. C. Mumford. Charges for Commercially Applied Pesticides. Oreg. Agr. Exp. Sta. Bull. 566, Jan. 1958.



7. Menkhaus, D. J. An Economic Review of the U.S. Pesticide Industry. Wyo. Agr. Exp. Sta. Res. Jour. 110, Dec. 1976.
8. Mumford, D. C. Pesticide Applications: Commercial Changes. Oreg. Agr. Exp. Sta. Bull. 571, Sept. 1959.
9. Santleman, P. W., and C. J. Sufres. Use of Pre-Emergence and Lay-By Herbicides in Cotton, Research Progress Report, 1962-1964. Okla. Agr. Exp. Sta. Process Serv. P-510, June 1965.
10. \_\_\_\_\_ . Use of Post-Emergence Herbicides in Cotton Research Progress Report, 1962-1964. Okla. Agr. Exp. Sta. Process Serv. P-511, June 1965.
11. Whitehorn, N. C., and H. B. Sorenson. Practices and Problems of Pesticide Marketing in Texas. Tex. Agr. Exp. Sta. MP-824, Dec. 1965.

#### Ph.D. Dissertations

1. Delvo, Herman W. "Economic Analysis of Herbicide Use Restriction Policies of Nebraska Cash Grain Farms." Ph.D. Dissertation. Univ. Neb., 1971.
2. Huh, S. H. "The Preventative and Incidental Demand for Pesticides: An Economic Analysis of the Demand for Herbicides and Insecticides Used by Selected Corn Producers in Minnesota." Ph.D. Dissertation. Univ. Minn., 1978.
3. Hunter, Thomas Kenneth. "Factors That Influence Utilization of Pesticides by Selected Vegetable Producers in Tennessee." Ph.D. Dissertation. Univ. Tenn., 1968.
4. Menkhaus, D. J. "The Effects of Environmental Legislation on the Structure of the Pesticide Industry: A Simulation Study." Ph.D. Dissertation. Purdue Univ., 1973.

#### M.S. Theses

1. Coulston, Lane Edward. "An Economic Analysis of Alternative Herbicide Practices." M.S. Thesis. Oreg. State Univ., 1969.
2. Johnson, James Lavaughn. "Dealers' Knowledge of Pesticides and Firms' Provision of Related Customer Services in Alabama." M.S. Thesis. Auburn Univ., 1966.

3. Sun, G. "Pesticides: Estimated Use by Missouri Farms, 1964." M.S. Thesis. Univ. Mo., 1971.
4. Whitehorn, N. C. "A Pilot Study of Pesticide Marketing in Texas." M.S. Thesis. Tex. A & M Univ., 1966.

## PETROLEUM

### Books

1. Allvine, F. C., and J. M. Patterson. Competition, Ltd. The Marketing of Gasoline. Bloomington, Ind.: Ind. Univ. Press., 1972.
2. Brownstein, A. M. U.S. Petrochemicals: Technologies, Markets, and Economics. Tulsa, Okla.: Petroleum Pub. Co., 1972.
3. Chapman, D., and others. The Structure of the U.S. Petroleum Industry. Washington, D.C.: U.S. Govt. Print. Off., 1977.
4. Copp, E. A. Regulating Competition in Oil: Government Intervention in the U.S. Refining Industry. College Station, Tex.: Tex. A & M Univ. Press, 1976.
5. Epple, D. Petroleum Discoveries and Government Policy: An Econometric Study of Supply. Cambridge, Mass.: Ballinger Pub., 1975.
6. Fisher, F. M. Supply and Costs in the U.S. Petroleum Industry: Two Econometric Studies. Reprint of 1964 edition. New York, N.Y.: AMS Press Inc., 1977.
7. Gary, J. H., and G. E. Handwerk. Petroleum Refining: Technology and Economics. New York, N.Y.: Dekker-Marcel Inc., 1975.
8. Griffin, J. M., and H. B. Steele. Energy Economics and Policy. New York, N.Y.: Academic Press, Inc., 1979.
9. Howard, M. C. Marketing of Petroleum Products. Editors, S. Bruchey, and V. P. Carroso. New York, N.Y.: Arno Press, Inc., 1979.
10. Locken, J., K. Cole, and D. Chapman. Users Guide to Petroleum Industry Survey Data Tape. Washington, D.C.: Natn'l. Tech. Info. Serv., 1977.
11. Lovejoy, W. F., and others. Problems of Cost Analysis in the Petroleum Industry. Dallas, Tex.: S. Meth. Univ. Press, 1964.

12. Mansvelt-Beck, F. W., and K. M. Wiig. Forecasting Oil and Gas Supplies from U.S. Offshore Areas. Lexington, Mass.: Lexington Books, 1977.
13. Markham, J. W., and others. Horizontal Divestiture and the Petroleum Industry. Cambridge, Mass.: Ballinger Pub., 1977.
14. Melvin, J. R. The Effects of Energy Price Changes on Commodity Prices, Interprovincial Trade and Employment. Buffalo, N.Y.: Univ. Toronto Press., 1976.
15. Mitchell, E. J. (ed.) Vertical Integration in the Oil Industry. Washington, D.C.: American Enterprise Institute for Public Policy Research, 1976.
16. Moran, T. H. Oil Prices and the Future of OPEC. Baltimore, Md.: The Johns Hopkins Univ. Press, 1978.
17. Nelson, W. L. Guide to Refinery Operating Costs. Tulsa, Okla.: Petroleum Pub. Co., 1976.
18. Pindyck, R. S. (ed.) Structure of Energy Markets. Greenwich, Conn.: Jai Press Inc., 1979.
19. Porter, S. Petroleum Accounting Practices. New York, N.Y.: McGraw-Hill Book Co., 1965.
20. Rifai, Taki. The Pricing of Crude Oil. New York, N.Y.: Praeger Pub., 1975.
21. Sunder, S. Oil Industry Profits. Washington, D.C.: American Enterprise Institute For Public Policy Research, 1977.

#### Journals

1. Adams, F. G., and J. M. Griffin. "An Econometric-Linear Programming Model of the U.S. Petroleum Refining Industry," Journal of the American Statistics Association, Vol. 67, No. 339 (Sept. 1972), pp. 542-51.
2. Adams, W. "Comments on 'The Implementation of Oligopolistic Interdependence: International Oil, A Case Study' and 'Market Structure and Interfirm Integration in the Petroleum Industry'." Journal of Economic Issues, Vol. 9, No. 2 (June 1975), pp. 341-42.



3. Barsky, C. "Occupational Wage Levels Cluster in Petroleum Refineries," Monthly Labor Review, Vol. 100, No. 6 (June 1977), pp. 54-56.
4. Blair, J. M. "The Implementation of Oligopolistic Interdependence: International Oil, A Case Study," Journal of Economic Issues, Vol. 9, No. 2 (June 1975), pp. 297-318.
5. Bolch, B., and W. W. Damon. "The Depletion Allowance and Vertical Integration in the Petroleum Industry," Southern Economic Journal, Vol. 45, No. 1 (July 1978), pp. 241-49.
6. Bruce, C. J. "The Open Petroleum Economy: A Comparison of Keynesian and Alternative Formulation," Social and Economic Studies, Vol. 21, No. 2 (June 1972), pp. 125-52.
7. Butler, J. D. "The Economic Influence of Economic Factors on Location of Oil Refineries," Journal of Industrial Economics, Vol. 1, No. 2 (July 1953), pp. 187-201.
8. Campbell, D. R. G. "Public Policy Problems of the Domestic Crude Oil Industry: Comment," American Economic Review, Vol. 54, No. 1 (Mar. 1964), pp. 114-18.
9. Collins, D. W., and M. C. O'Connor. "An Examination of the Association Between Accounting and Share Price Data in the Extractive Petroleum Industry: A Comment and Extension," Accounting Review, Vol. 53, No. 1 (Jan. 1978), pp. 228-39.
10. Copp, E. A. "Technical Change and Petroleum Drilling Costs: Reply," Land Economics, Vol. 52, No. 1 (Feb. 1976), pp. 109-16.
11. Corssmit, C. W. "The Oil Import Quota System: Time for Reform," Intermountain Economic Review, Vol. 2, No. 2 (Fall 1971), pp. 35-46.
12. Cox, J. C., and A. W. Wright. "The Determinants of Investment in Petroleum Reserves and Their Implications for Public Policy," American Economic Review, Vol. 66, No. 1 (Mar. 1976), pp. 153-67.
13. \_\_\_\_\_. "The Effects of Crude Oil Price Controls, Entitlements and Taxes on Refined Product Prices and Energy Independence," Land Economics, Vol. 54, No. 1 (Feb. 1978), pp. 1-15.

14. Crommelin, M. "Offshore Oil and Gas Rights: A Comparative Study," Natural Resources Journal, Vol. 14, No. 4 (Oct. 1974), pp. 457-500.
15. Cross, J. S. "Vertical Integration in the Oil Industry," Journal of Industrial Economics, Vol. 1, No. 2 (July 1953), pp. 202-11.
16. Dam, K. W. "Implementation of Import Quotas: The Case of Oil," Journal of Law and Economics, Vol. 14, No. 1 (Apr. 1971), pp. 1-60.
17. Danielsen, A. L. "Cartel Rivalry and the World Price of Oil," Southern Economic Journal, Vol. 42, No. 3 (Jan. 1976), pp. 407-15.
18. \_\_\_\_\_, and C. D. DeLorme, Jr. "Elasticities of Demand for Crude Oil in the United States, 1929-41 and 1948-73," Review of Business and Economic Research, Vol. 11, No. 2 (Winter 75/76), pp. 19-29.
19. \_\_\_\_\_. "More on the Estimation of Demand for Crude Oil," Review of Business and Economic Research, Vol. 13, No. 1 (Fall 1977), pp. 108-10.
20. Davison, P. "Public Policy Problems of the Domestic Crude Oil Industry: Comment," American Economic Review, Vol. 54, No. 1 (Mar. 1964), pp. 125-34.
21. Deacon, R. T. "An Economic Analysis of Gasoline Price Controls," Natural Resources Journal, Vol. 18, No. 4 (Oct. 1978), pp. 801-14.
22. Desvousges, W. H., and M. J. Piette. "The Effect of 'Large' Mergers on Concentration Trends in Petroleum Production, 1955-1975," Southern Economic Journal, Vol. 54, No. 4 (Oct. 1979), pp. 615-22.
23. Dixon, D. F. "Gasoline Marketing: The First Fifty Years," Journal of Industrial Economics, Vol. 13, No. 3 (Nov. 1964), pp. 23-42.
24. Enos, J. L. "A Measure of the Rate of Technological Progress in the Petroleum Refining Industry," Journal of Industrial Economics, Vol. 6, No. 2 (June 1958), pp. 180-97.
25. Erickson, E. W., and others. "The Political Economy of Crude Oil Price Controls," Natural Resources Journal, Vol. 18, No. 4 (Oct. 1978), pp. 787-800.

26. Eskew, R. K. "An Examination of the Association Between Accounting and Share Price Data in the Extractive Petroleum Industry," Accounting Review, Vol. 50, No. 2 (Apr. 1975), pp. 316-24.
27. \_\_\_\_\_. "An Examination of the Association Between Accounting and Share Price Data in the Extractive Petroleum Industry: A Reply," Accounting Review, Vol. 53, No. 1 (Jan. 1978), pp. 240-46.
28. Farnsworth, R. L., and R. B. Norgaard. "Technical Change and Petroleum Drilling Costs: Comment," Land Economics, Vol. 52, No. 1 (Feb. 1976), pp. 103-08.
29. Frankel, P. H. "Integration in the Oil Industry," Journal of Industrial Economics, Vol. 1, No. 2 (July 1953), pp. 202-11.
30. \_\_\_\_\_. "The Significance of Marginal Capacity in the Oil Industry," Journal of Industrial Economics, Vol. 10, No. 1 (Mar. 1962), pp. 93-99.
31. Freedman, D. H. "Oil, Commodities and Prices: Economic and Social Consequences of an Evolving World Situation," International Labor Review, Vol. 111, No. 1 (Jan. 1975), pp. 69-87.
32. Griffin, J. M. "The Process Analysis Alternative to Statistical Cost Functions: An Application to Petroleum Refining," American Economic Review, Vol. 62, No. 1 (Mar. 1972), pp. 46-56.
33. Hassan, M. F. "International Petroleum and U.S. Market," Nebraska Journal of Economics and Business, Vol. 13, No. 4 (Autumn 1974), pp. 109-16.
34. Hidy, R. H. "The Standard Oil Company," Journal of Economic History, Vol. 12 (1952), pp. 356-66.
35. \_\_\_\_\_. "Government and the Petroleum Industry to 1911," Journal of Economic History, Vol. 10 (1950), pp. 82-91.
36. Houthakker, H. S., P. K. Verleger, Jr., and D. P. Sheehan. "Dynamic Demand Analysis for Gasoline and Residential Electricity," American Journal of Agricultural Economics, Vol. 56, No. 2 (May 1974), pp. 412-18.
37. Howard, M. C. "Interfirm Relations in Oil Product Markets," Journal of Marketing, Vol. 20 (Apr. 1956), pp. 356-66.



38. Hutchinson, P. M., and D. D. Ferrone. "An Alternative Estimation of the Demand for Crude Oil," Review of Business and Economic Research, Vol. 13, No. 1 (Fall 1977), pp. 100-07.
39. Jones, R. O., W. J. Mead, and P. E. Sorensen. "Free Entry into Crude Oil and Gas Production and Competition in the U.S. Oil Industry," Natural Resources Journal, Vol. 18, No. 4 (Oct. 1978), pp. 859-75.
40. Kaufman, B. I. "Oil and Antitrust: The Oil Cartel Case and the Cold War," Business History Review, Vol. 51, No. 1 (Spring 1977), pp. 35-56.
41. Keith, R. F., and D. W. Fischer. "Assessing the Development Decision-Making Process: A Case Study of Canadian Frontier Petroleum Development," American Journal of Economics and Sociology, Vol. 36, No. 2 (Apr. 1977), pp. 147-64.
42. Kennedy, M. "An Economic Model of the World Oil Market," Bell Journal of Economics and Management Science, Vol. 5, No. 2 (Autumn 1974), pp. 540-77.
43. Lebanon, A. "An Oligopolistic Model of the World Supply of Crude Petroleum," Applied Economics, Vol. 7, No. 1 (Mar. 1975), pp. 9-16.
44. Lindsay, R. "Regional Advantage in Oil Refining," Regional Science Association Proceedings, Vol. 2 (July 1956), pp. 304-17.
45. Livshits, R. "On the Relationship Between the Extractive and Manufacturing Industries," Problems of Economics, Vol. 17, No. 3 (July 1974), pp. 22-40.
46. Manne, A. S. "A Linear Programming Model of the United States Petroleum Refining Industry," Econometrica, Vol. 26, No. 1 (Jan. 1958), pp. 67-106.
47. Marshalla, R. A. "Intertemporal Efficiency and the World Price of Oil: An Empirical Model," Annals of Economic and Social Measurement, Vol. 6, No. 2 (Spring 1977), pp. 203-24.
48. McGee, J. S. "Conservation, Integration and Pricing in the Oil Industry of United States," Journal of Industrial Economics, Vol. 8, No. 3 (Nov. 1960), pp. 63-82.

49. McKie, J. W. "Market Structure and Uncertainty in Oil and Gas Exploration," Quarterly Journal of Economics, Vol. 74, No. 4 (Nov. 1960), pp. 543-71.
50. Mead, D. E. "The Effect of Vertical Integration on Risk in the Petroleum Industry," Quarterly Review of Economics and Business, Vol. 18, No. 1 (Spring 1978), pp. 83-90.
51. Miller, E. "Some Implications of Land Ownership Patterns for Petroleum Policy," Land Economics, Vol. 49, No. 4 (Nov. 1973), pp. 414-23.
52. Nelson, J. R. "Prices, Costs and Conservation in Petroleum," American Economics Association Proceedings and Papers, Vol. S48 (May 1958), pp. 502-15.
53. Norgaard, R. B. "Petroleum Development in Alaska: Prospects and Conflicts," Natural Resources Journal, Vol. 12, No. 1 (Jan. 1972), pp. 83-107.
54. \_\_\_\_\_. "Resource Scarcity and New Technology in U.S. Petroleum Development," Natural Resources Journal, Vol. 15, No. 2 (Apr. 1975), pp. 265-82.
55. Pelto, C. R. "Statistical Structure of Bidding for Oil and Mineral Rights," Journal of the American Statistical Association, Vol. 66, No. 335 (Sept. 1971), pp. 456-60.
56. Ramsey, J., R. Rasche, and B. Allen. "An Analysis of the Private and Commercial Demand for Gasoline," Review of Economics and Statistics, Vol. 57, No. 4 (Nov. 1975), pp. 502-07.
57. Rausser, G. C. "Technological Change, Production, and Investment in Natural Resources Industries," American Economic Review, Vol. 64, No. 6 (Dec. 1974), pp. 1049-59.
58. Rees, T. M. "A Rational Way to Develop Shale Oil," American Journal of Economics and Sociology, Vol. 33, No. 4 (Oct. 1974), pp. 437-38.
59. Renshaw, E. F. "Taxation of Crude Oil, Gasoline, and Related Fuels and Commodities," Growth Change, Vol. 10, No. 1 (Jan. 1979), pp. 75-86.

60. \_\_\_\_\_. "A Note on Petroleum Taxes to Increase Domestic Welfare and Reduce the Monopoly Profits of the International Oil Cartel," Public Finance, Vol. 31, No. 1 (1976), pp. 132-43.
61. Rice, P., and V. K. Smith. "An Econometric Model of the Petroleum Industry," Journal of Econometrics, Vol. 6, No. 3 (Nov. 1977), pp. 263-87.
62. Salant, S. W. "Exhaustible Resources and Industrial Structure: A Nash Cournot Approach to the World Oil Market," Journal of Political Economy, Vol. 84, No. 5 (Oct. 1976) pp. 1079-93.
63. Schwartz, D. S. "Comments on 'Market Structure and Interfirm Integration'," Journal of Economic Issues, Vol. 9, No. 2 (June 1975), pp. 337-40.
64. Schwartzman, D. "The Cost-Elasticity of Demand and Industry Boundries: Coal, Oil, Gas, Uranium," Antitrust Bulletin, Vol. 18, No. 3 (Fall 1973), pp. 483-507.
65. Smith, R. T., and G. E. Phelps. "The Subtle Impact of Price Controls on Domestic Oil Production," American Economic Review, Vol. 68, No. 2 (May 1978), pp. 428-33.
66. Soladay, J. J. "Monopoly and Crude Oil Extraction," American Economic Review, Vol. 69, No. 1 (Mar. 1979), pp. 234-39.
67. Steele, H. "Public Policy Problems of the Domestic Crude Oil Industry: Comment," American Economic Review, Vol. 54, No. 1 (Mar. 1964), pp. 119-25.
68. Stiglitz, J. E. "Monopoly and the Rate of Extraction of Exhaustible Resources," American Economic Review, Vol. 66, No. 4 (Sept. 1976), pp. 655-61.
69. Uhler, R. S. "Costs and Supply in Petroleum Exploration: The Case of Alberta," Canadian Journal of Economics, Vol. 9, No. 1 (Feb. 1976), pp. 72-90.
70. Von Furstenburg, G. M. "Taxation of Crude Oil, Gasoline, and Related Fuels and Commodities: Comment," Growth Change, Vol. 10, No. 1 (Jan. 1979), pp. 87-89.
71. Watkins, G. C. "Competitive Bidding and Alberta Petroleum Rents," Journal of Industrial Economics, Vol. 23, No. 4 (June 1975), pp. 301-12.



72. \_\_\_\_\_. "Prorating and the Economic Efficiency of Crude Oil Production," Canadian Journal of Economics, Vol. 3, No. 3 (Aug. 1970), pp. 511-15.
73. Williamson, H. F., and R. L. Andreano. "Integration and Competition in the Oil Industry," Journal of Political Economy, Vol. 69, No. 4 (Aug. 1961), pp. 381-85.
74. Wilson, J. W. "Market Structure and Interfirm Integration in the Petroleum Industry," Journal of Economic Issues, Vol. 9, No. 2 (June 1975), pp. 319-35.
75. Wilson, R. R. "Petroleum for Agriculture," American Journal of Agricultural Economics, Vol. 56, No. 5 (Dec. 1974), pp. 888-95.
76. Wilson, T. "The Price of Oil: A Case of Negative Marginal Revenue," Journal of Industrial Economics, Vol. 27, No. 4 (June 1979), pp. 301-15.

U.S. Department  
of Agriculture

1. Bailey, J. M. Potential for Cooperative Distribution of Petroleum Products in the South. FCS-91. U.S. Dept. Agr., Farmer Coop. Serv., Mar. 1973.
2. Brodell, A. P., and A. R. Kendall. Farm Consumption of Liquified Petroleum Gases. FM-87. U.S. Dept. Agr., Bur. Agr. Econ., July 1951.
3. Gessner, A. L., and J. W. Mather. Integrated Petroleum Operations Through Farmer Cooperatives, 1950 and 1957. FCS-58. U.S. Dept. Agr., Farmer Coop. Serv., May 1959.
4. Mather, J. W. Petroleum Operations of Farmer Cooperatives. C-139. U.S. Dept. Agr., Farm Credit Admin., May 1951.

Experiment Stations

1. Anderson, D. G., and R. G. Walsh. Efficiency of Tank Wagon Delivery of Farm Petroleum Products. Neb. Agr. Exp. Sta. SB-503, Mar. 1969.
2. Casey, J. E., R. D. Lacewell, and L. L. Jones. Impact of Limited Fuel Supplies on Agricultural Output and Net Returns: Southern High Plains of Texas. Tex. Agr. Exp. Sta. MP-1175, Jan. 1975.
3. Francois, C. F., and E. P. Roy. Costs, Returns, and Payout of Retail Gasoline Operations Within Louisiana Farm Supply Stores. La. Agr. Exp. Sta. DAE. Res. Rep. 430, June 1971.

4. Frith, R. R. Estimates of Fuel Consumption for Farming and Ranching Operations Under Typical North Dakota Conditions. N. Dak. Agr. Exp. Sta. Bull. 493, Apr. 1974.
5. Grant, D. L. Oil and Gas Leasing of Idaho Farm and Ranch Land. Univ. Idaho Agr. Exp. Sta. Bull. 569, Oct. 1976.
6. Pagoulatos, A. E., and D. Debertin. The Supply of New Discoveries of Crude Oil, Production Out of Reserves, and Determination of Total Refinery Output in the U.S. Ky. Agr. Exp. Sta. Res. Rep. 28, Feb. 1977.
7. Wiggins, P. L., and E. P. Roy. Economic Feasibility of Wholesale and Retail Petroleum Outlets for Supplying Louisiana Farmers. La. Agr. Exp. Sta. DAE Res. Rep. 385, Nov. 1968.

Ph.D. Dissertations

1. Allen, R. L. "The Petroleum Industry; Public or Private?" Ph.D. Dissertation. Colo. State Univ., 1976.
2. Anderson, Dale G. "Structural Changes in Farm Petroleum Distribution: Efficiency of Tank Wagon Delivery." Ph.D. Dissertation. Univ. Neb., 1966.
3. Andreano, Ralph L. "The Emergence of New Competition in the American Petroleum Industry Before 1911." Ph.D. Dissertation. Northwestern Univ., 1961.
4. Bateman, James Fred, Jr. "Innovation and Economic Change in American Petroleum Pipelines." Ph.D. Dissertation. Tulane Univ., 1965.
5. Biesoit, Peter Gerard. "Concentration and Trends in the California Petroleum Industry." Ph.D. Dissertation. Univ. Southern California, 1966.
6. Chou, W. "A Market Oriented World Petroleum Model." Ph.D. Dissertation. Univ. Ill., 1977.
7. Doyle, J. M. "An Economic Analysis of Interfuel Competition." Ph.D. Dissertation. Mich. State Univ., 1977.
8. Dvoskin, D. "A National Model of Energy Use in Agricultural Production." Ph.D. Dissertation. Iowa State Univ., 1976.

9. El-Salam, Ahmed Wafik Abd. "Financial Analysis of the Petroleum Refining Industry, 1946-1960." Ph.D. Dissertation. Univ. Ill., 1968.
10. Flaim, T. A. "The Structure of the U.S. Petroleum Industry: Concentration, Vertical Integration and Joint Activities." Ph.D. Dissertation. Cornell Univ., 1977.
11. Gidwani, Sushilo Jashansing. "Economic Causes and Effects of Technological Growth: A Case Study of the Petroleum Refining Industry of the United States of America." Ph.D. Dissertation. Univ. Minn., 1964.
12. Hamilton, David Corning. "The Gulf Coast Refinery Market from 1925 to 1950: A Study in Market Behavior." Ph.D. Dissertation. Columbia Univ., 1954.
13. Haner, Fred T. "An Economic Projection of the Domestic Petroleum Industry." Ph.D. Dissertation. Univ. Pittsburg, 1959.
14. Haskell, J. E. "Optimum Size and Number of Farm Petroleum Distribution Facilities in Kansas: A Study of Plant and Distribution Costs." Ph.D. Dissertation. Kan. State Univ., 1970.
15. Hertzmark, D. I. "Economics, Thermodynamics, and the Allocation of Energy." Ph.D. Dissertation. Univ. Wis., 1978.
16. Kim, Y. Y. "An Economic Model of New Crude Oil and Natural Gas Supplies in the Lower 48 States." Ph.D. Dissertation. Univ. Houston, 1977.
17. McMichael, Robert Nance. "Plant Location Factors in the Petrochemical Industry in Louisiana." Ph.D. Dissertation. La. State Univ., 1961.
18. Moffitt, L. J. "A Disequilibrium Analysis of Agricultural, Commercial, and Consumer Gasoline Demand." Ph.D. Dissertation. Univ. Calif. (Berk.), 1979.
19. Pagoulatos, A. "Major Determinants Affecting the Demand and Supply of Energy Resources of the U.S." Ph.D. Dissertation. Iowa State Univ., 1975.
20. Rollins, J. B. "Prices, Inventories, and Capacity: A Theoretical Empirical Study of the Downstream Petroleum Industry." Ph.D. Dissertation. Tex. A & M Univ., 1978.



M.S. Theses

1. Anderson, Dale G. "The Transportation of Farm Supplies into the Northern Great Plains States." M.S. Thesis. Univ. Neb., 1963.
2. Beck, Clifford Reverie. "Factors Determining Acquisition and Retention of Customers in the Retail Petroleum Industry." M.S. Thesis. Kansas State Univ., 1958.
3. Capps, O., Jr. "The Demand for Gasoline and Diesel Fuel in Agriculture in Virginia." M.S. Thesis. Va. Poly. Inst., 1978.
4. Elliott, Wayne Richard. "Farm Management Possibilities for Oil Companies." M.S. Thesis. Cornell Univ., 1950.
5. Erickson, Stanford G. "Cooperatives as an Element in the Market Structure of Bulk Petroleum Plants in North Dakota." M.S. Thesis. N. Dak. State Univ., 1970.
6. Farthing, D. C. "Fuel Price and Fuel Allocation Scenarios as Components of Risk Evaluation on a Typical Northwest Missouri Crop Farm." M.S. Thesis. Univ. Mo., 1978.
7. Ficalora, J. J. "An Excess Demand Model of the Gasoline Industry." M.S. Thesis. S. Dak. State Univ., 1974.
8. Hall, Howard Laird. "A Study of Membership Relations in Twelve Kansas Petroleum Cooperative Purchasing Associations." M.S. Thesis. Kans. State Univ., 1950.
9. Hepfinger, B. R. "An Estimation of the Price Elasticity of Demand in the Gasoline Industry." M.S. Thesis. S. Dak. State Univ., 1975.
10. Hertzke, A. D. "The Impact of a Growing Energy Industry on Agriculture." M.S. Thesis. Cornell Univ., 1975.
11. Lehrmann, J. A. "Direct Economic Effects of Increased Energy Prices on Optimal Corn and Soybean Production on Cash Grain Farms in Southeastern Michigan." M.S. Thesis. Mich. State Univ., 1976.
12. Safley, C. D. "Impact of Changes in Supply-Prices of Energy and Energy Based Materials on Tennessee Beef Backgrounding Systems." M.S. Thesis. Univ. Tenn., 1976.
13. Shuyler, Kent David. "An Economic Analysis of Bulk Petroleum Operations in Selected Kansas Cooperatives." M.S. Thesis. Kans. State Univ., 1968.

14. Taylor, Byron Eugene. "Analysis of Economic Factors Affecting Success of Operations of Selected Midwestern Petroleum Cooperatives." M.S. Thesis. Kans. State Univ., 1958.

Ongoing Current  
Research Infor-  
mation System  
(CRIS) Projects

1. Elterich, J. G. "Farm Management, Energy and Machinery Use in Mid-Atlantic States." Univ. Del., Newark, Del. Period: 7-1-77 to 9-30-81. Objectives: Considers crop management practices such as the different cover crops (especially legumes), chemical treatment such as herbicides, insecticides and fungicides--their timing and size of operations--and evaluates their respective profitabilities; develops--model situations for the management of crop practices that will achieve greater economy--both in terms of increasing profits and reducing costs of energy and labor; and determines optimum size of farm business under conventional and reduced tillage operations for a sample of soil conditions and for different tenure systems.
2. Hamilton, J. R. "Energy in Western Agriculture." Univ. Idaho, Moscow, Idaho. Period: 7-1-74 to 6-30-80. Objectives: Examines and analyzes adjustments which might result from changes in prices and supplies of energy resources, and consequent impacts on Western agriculture.
3. Jensen, H. R. "An Economic Analysis of Minnesota Farm Adjustments to Increasing Energy Prices." Univ. Minn., St. Paul, Minn. Period: 7-1-77 to 6-30-80. Objectives: Estimates the energy embodied in capital inputs; estimates optimum adjustments in resource use, production methods and output on representative Minnesota farms as energy prices increase; and estimates aggregate shifts in energy use and production by Minnesota's commercial agriculture as energy prices increase.

Completed Current  
Research Infor-  
mation System  
(CRIS) Projects

1. Dubov, I. "Supply-Price Relations for Energy, Petrochemicals, and Related Inputs for Tennessee Beef Industry." Univ. Tenn., Knoxville, Tenn. Period: 10-30-75 to 9-30-79. Objectives: Determined changes in supply-price relations for energy sources, petrochemical-based materials, and related items used in the Tennessee beef industry; determined the effects of these changes on costs, efficiencies, operating programs, and procedures; and estimated efficiency adjustments to these changes.

2. Gopalakrishnan, C. "Energy in Western Agriculture-Requirements, Adjustments and Alternatives." Univ. Hawaii, Honolulu, Hawaii. Period: 7-1-74 to 9-30-79. Objectives: Estimated patterns and amounts of energy inputs currently utilized in western agriculture; examined and analyzed adjustments which might result from changes in prices and supplies of energy resources as well as the consequent impacts on western agriculture; and assessed contributions of, and prospects for, alternative technologies and policies for dealing with changes in energy availability.
3. Johnston, W. E. "Energy in Western Agricultural Requirements, Adjustments and Alternatives." Univ. Calif., Davis, Calif. Period: 7-1-73 to 6-30-78. Objectives: Examined and analyzed adjustments which might result from changes in prices and supplies of energy resources, and consequent impacts on western agriculture; and assessed contributions of, and prospects for, alternative technologies and policies for dealing with changes in energy availability.
4. Whittlesey, N. K. "Energy in Western Agriculture: Requirement, Adjustments and Alternatives." Wash. State Univ., Pullman, Wash. Period: 7-1-74 to 6-30-79. Objectives: Estimated current patterns and amounts of energy inputs currently utilized in western agriculture; examined and analyzed adjustments which might result from changes in price and supplies of energy resources and consequent impacts on western agriculture; and assessed contributions of, and prospects for, alternative technologies and policies for dealing with changes in energy availability.

## SEED

### Journals

1. Ethridge, M. D., F. C. White, and D. Kannan. "Optimizing Seed Acreage: Decision-Making with Production and Utilization Uncertainties," American Journal of Agricultural Economics, Vol. 57, No. 3 (Aug. 1975), pp. 439-49.
2. Ganeriwal, A. L. "Financial Needs of Seed Industry," Agriculture And Agro-Industries Journal, Vol. 4, No. 1 (Jan. 1971), pp. 9-12.
3. Griliches, Z. "Hybrid Corn: An Exploration in the Economics of Technological Change." Econometrics, Vol. 25, No. 4 (Oct. 1957), pp. 501-22.



4. Hiebert, L. D. "Risk, Learning and the Adoption of Fertilizer Responsive Seed Varieties," American Journal of Agricultural Economics, Vol. 56, No. 4 (Nov. 1974), pp. 764-68.
5. Nagy, J. G., and W. H. Furtan. "Economic Costs and Returns From Crop Development Research: The Case of Rapeseed Breeding in Canada," Canadian Journal of Agricultural Economics, Vol. 26, No. 1 (Feb. 1978), pp. 1-14.

U.S. Department  
of Agriculture

1. Askew, W. R. Seed Marketing Channels for Grass and Small Seeded Legumes in the North Central States, 1954-1955. RR-158. U.S. Dept. Agr., Agr. Mktg. Serv., Mar. 1957.
2. Boller, R. A. Studies on a Commercial Feed-Blending Operation. AMS-368. U.S. Dept. Agr., Agr. Mktg. Serv., Nov. 1960.
3. U.S. Department of Agriculture, Economics, Statistics, and Cooperatives Service, Crop Reporting Board. Prices Paid by Farmers for Seed April 15 and September 15, 1962-78. SB-615. Feb. 1979.
4. \_\_\_\_\_, Statistical Reporting Service. Seed Crops 1964-69. SB-499. Nov. 1972.

Experiment Stations

1. Aspelin, A. L. Comparisons of Profitability of Certified and Uncertified Alfalfa Seed Production in South Dakota. S. Dak. Exp. Sta., Agr. Econ., Pam. 197, Aug. 1960.
2. \_\_\_\_\_, and C. J. Miller. Production Methods and Costs for Certified Seed of Selected Crops in Nebraska. Neb. Ag. Exp. Sta., SB-469, Feb. 1962.
3. Benrud, C. H. Interregional Competition in Alfalfa Seed Production In the United States. S. Dak. Agr. Exp. Sta., Agr. Econ., Pam 108, Sept. 1960.
4. \_\_\_\_\_, and D. C. Dahl. The Northern Alfalfa Seed Picture: Production. S. Dak. Agr. Exp. Sta., Bull. 482, Sept. 1959.
5. Cable, C. C. Retailing and Wholesaling Cotton Planting Seed in Arkansas. Ark. Agr. Exp. Sta., Bull. 566, June 1955.
6. Christian, W. E., Jr., and B. K. Doyle. Mississippi Seed Industry. Miss. Agr. Exp. Sta., Circ. 153, June 1950.

7. Conklin, F. S. Oregon State University Research on Field Burning, Ore. Agr. Exp. Sta., Pub. 647, Dec. 1974.
8. \_\_\_\_\_, and J. Dean. Costs and Returns of Grass Seed Production in Oregon's Willamette Valley. Ore. Agr. Exp. Sta., Spec. Rep. 464, Oct. 1976.
9. \_\_\_\_\_, and D. E. Fischer. Economic Characteristics of Farms Producing Grass Seed in Oregon's Willamette Valley. Ore. Agr. Exp. Sta., Info. Circ. 643.
10. Dahl, D. C. Marketing Northern Alfalfa Seed: A Progress Report. S. Dak. Agr. Exp. Sta., Agr. Econ., Pam. 95, July 1958.
11. \_\_\_\_\_, and C. H. Benrud. The Northern Alfalfa Seed Picture: Marketing. S. Dak. Agr. Exp. Sta., Bull. 483, Sept. 1959.
12. Funk, T. F., and J. C. Snyder. Trends in Seed Corn Marketing. Ind. Agr. Exp. Sta., Res. Prog. Rep. 273, Feb. 1967.
13. McKee, G. W., and others. Factors Affecting the Farmers' Choice and Use of Seed. Pa. Agr. Exp. Sta., Bull. 707, Dec. 1963.
14. Sorenson, E. L., C. C. Burkhardt, and W. Fowler. Alfalfa Seed Production in Kansas. Kans. Agr. Exp. Sta., Circ. 290, Mar. 1958.
15. Sumner, D. C., J. R. Goss, and L. Marbl. Production of Grass Seed in California. Calif. Agr. Exp. Sta., Circ. 487, Mar. 1960.

#### Ph.D. Dissertations

1. Benrud, Charles Harris. "Economic and Other Factors Associated With Variation in Alfalfa Seed Production in South Dakota." Ph.D. Dissertation. Univ. Minn., 1963.
2. Greene, Charles Henry. "Costs and Efficiency in the Operation of Oregon Seed Processing Warehouses." Ph.D. Dissertation. Ore. State Univ., 1963.
3. Griliches, Zvi. "Hybrid Corn: An Exploration in Economics of Technological Change." Ph.D. Dissertation. Univ. Chicago, 1958.

M.S. Theses

1. Aspelin, Arnold L. "Comparisons of the Profitability of Certified and Uncertified Alfalfa Seed Production in South Dakota." M.S. Thesis. S. Dak. State Univ., 1960.
2. Biery, Freeman. "A Report and Analysis of the Marketing of Nebraska Certified Wheat Seed." M.S. Thesis. Univ. Neb., 1963.
3. Brosa, Julius Albert. "Marketing Alfalfa Seed In Kansas." M.S. Thesis. Kans. State Univ., 1956.
4. Burt, L. A. "Economic Analysis of Grass Seed Cultural Practices in Eastern Washington and Northern Idaho." M.S. Thesis. Wash. State Univ., 1976.
5. Campbell, Harold T. "Factors Influencing the Use of High Quality Seed by Farmers." M.S. Thesis. Pa. State Univ., 1965.
6. Chetty, Pokkali Ramilingan. "A Program for the Production and Distribution of Certified Seed in Madras State." M.S. Thesis. Univ. Tenn., 1962.
7. DaSilva, L. J. "Analysis of the Foundation Seed Industry for Soybeans in Mississippi." M.S. Thesis. Miss. State Univ., 1975.
8. Dahl, Dale Curtis. "Marketing Northern Alfalfa Seed." M.S. Thesis. S. Dak. State Univ., 1959.
9. Funk, T. "A Systems Approach to Market Planning: Application to the Seed Corn Industry." M.S. Thesis. Purdue Univ., 1967.
10. Goodwin, Jack Bond. "An Economical Analysis of Alfalfa Seed Production Costs and Returns in Utah, 1952." M.S. Thesis. Utah State Univ., 1955.
11. Guevara, R. J. "An Economic Analysis of Conditioned Seed Storage Facilities." M.S. Thesis. Miss. State Univ., 1979.
12. Rostran, A. "Economic Efficiency in Seed Processing Facilities." M.S. Thesis. Miss. State Univ., 1975.
13. Sampson, Glenn R. "The Processing, Packaging, and Marketing of Certified Seed in Nebraska." M.S. Thesis. Univ. Neb., 1958.



14. Seehusen, Marvin Harm. "Factors Affecting the Location of Seed Conditioning Facilities in Ohio." M.S. Thesis. Ohio State Univ., 1959.
15. Smith, Roland Dean. "An Economic Analysis of Custom Seed Cleaning Operations in Oklahoma." M.S. Thesis. Okla. State Univ., 1968.

## WATER

### Books

1. Bain, J. S., R. E. Caves, and J. Margolis. Northern California's Water Industry; the Comparative Efficiency of Public Enterprise in Developing a Scarce Natural Resource. Baltimore, Md.: The John Hopkins Press, 1966.
2. Douglas, J. L., and R. R. Lee. Economics of Water Resources Planning. New York, N.Y.: McGraw Hill Book Co., 1971.
3. Hirshleifer, J., J. C. DeHaven, and J. W. Milliman. Water Supply: Economics, Technology, and Policy. Chicago, Ill.: The Univ. Chicago Press, 1969.
4. Jacobstein, J. M., and R. M. Mersky. Water Law Bibliography, 1847-1965, Source Book on U.S. Water and Irrigation Studies Legal, Economic and Political. Silver Spring, Mass.: Jefferson Lawbook Co., 1966.
5. Kelso, M. M., W. E. Martin, and L. E. Mack. Water Supplies and Economic Growth in an Arid Environment: An Arizona Case Study. Tucson, Ariz.: The Univ. Ariz. Press, 1973.
6. Smith, S. C., and E. N. Castle (Ed.). Economics and Public Policy in Water Resource Development. Ames, Iowa: Iowa State Univ. Press, 1964.
7. Wollman, N. The Value of Water in Alternative Uses. Albuquerque, N. Mex.: The Univ. Mex. Press, 1962.

### Journals

1. Anderson, R. L. "The Irrigation Water Rental Market: A Case Study," Agricultural Economics Research. Vol. 13, No. 2 (Apr. 1961), pp. 54-58.
2. \_\_\_\_\_. "Emerging Non-Irrigation Demands for Water," Agricultural Economics Research. Vol. 17, No. 4 (Oct. 1965), pp. 116-21.

3. \_\_\_\_\_. "Windfall Gains From Transfer of Water Allotments Within the Colorado-Big Thompson Project," Land Economics. Vol. 43, No. 3 (Aug. 1967), pp. 265-73.
4. \_\_\_\_\_. "The Effects of Streamflow Variation on Production and Income of Irrigated Farms Operating Under the Doctrine of Prior Appropriation," Water Resources Research. Vol. 11, No. 1 (Feb. 1975), pp. 15-22.
5. Barlowe, R. "Discussion: Can Water be Allocated by Competitive Prices?" Journal of Farm Economics. Vol. 38, No. 5 (Dec. 1956), pp. 1279-82.
6. Brown, G., and C. B. McGuire. "A Socially Optimum Pricing Policy for a Public Water Agency," Water Resources Research. Vol. 3, No. 1 (first quarter 1967), pp. 33-43.
7. Burt, O. R. "Economic Control of Groundwater Reserves," Journal of Farm Economics. Vol. 48, No. 3 (Aug. 1966), pp. 632-47.
8. Cicchetti, C. J., V. K. Smith, and J. Carson. "An Economic Analysis of Water Resource Investments and Regional Economic Growth," Water Resources Research. Vol. 11, No. 1 (Feb. 1975), pp. 1-6.
9. Ciriacy-Wantrup, S. V. "Cost Allocation in Relation to Western Water Policies," Journal of Farm Economics. Vol. 36, No. 1 (Feb. 1954), pp. 108-29.
10. \_\_\_\_\_. "Some Economic Issues in Water Rights," Journal of Farm Economics. Vol. 37, No. 5 (Dec. 1955), pp. 875-85.
11. \_\_\_\_\_. "Concepts Used as Economic Criteria for a System of Water Rights," Land Economics. Vol. 32, No. 4 (Nov. 1956), pp. 295-312.
12. \_\_\_\_\_. "Projections of Water Requirements in the Economics of Water Policy," Journal of Farm Economics. Vol. 43, No. 2 (May 1961), pp. 197-214.
13. \_\_\_\_\_. "Water Quality, a Problem for the Economist," Journal of Farm Economics. Vol. 43, No. 5 (Dec. 1961), pp. 1133-46.

14. Clark, C. "The Value of Irrigation Water," Economic Analysis and Policy. Vol. 2, No. 2 (Sept. 1971), pp. 14-18.
15. Clyde, G. D. "What Determines the Value of Water?" Journal of Soil and Water Conservation. Vol. 6, No. 2 (Apr. 1951), pp. 87-91, 106, 110.
16. Crew, M., and G. Roberts. "Some Problems of Pricing Under Stochastic Supply Conditions: The Case of Seasonal Pricing for Water Supplies," Water Resources Research. Vol. 6, No. 5 (Oct. 1970), pp. 1272-76.
17. Cummings, R. G., and J. W. McFarland. "Economic Aspects of Ground Water Resources and Replacement Flows in Semi-Arid Agricultural Areas: Comment," American Journal of Agricultural Economics. Vol. 56, No. 4 (Nov. 1974), pp. 830-31.
18. Davis, I. F. "Discussion: Theoretical Considerations of Water Allocation Among Competing Uses and Users," Journal of Farm Economics. Vol. 38, No. 5 (Dec. 1956), pp. 1276-78.
19. Dawson, J. A. "The Productivity of Water in Agriculture," Journal of Farm Economics. Vol. 39, No. 5 (Dec. 1957), pp. 1244-55.
20. Dudley, N. J., D. T. Howell, and W. F. Musgrave. "Optimal Intraseasonal Irrigation Water Allocation," Water Resources Research. Vol. 7, No. 4 (Aug. 1971), pp. 770-88.
21. Freeman, A. M. "Adjusted Benefit-Cost Ratios for Six Recent Reclamation Projects," Journal of Farm Economics. Vol. 48, No. 4 (Nov. 1966), pp. 1002-12.
22. Gaffney, M. M. "Water Law and Economic Transfers of Water," Journal of Farm Economics. Vol. 44, No. 2 (May 1962), pp. 427-34.
23. Gertel, K., and N. Wollman. "Price and Assessment Guides to Western Water Allocation," Journal of Farm Economics. Vol. 42, No. 5 (Dec. 1960), pp. 1332-44.
24. Gill, S. S., J. S. Chawla, and G. S. Khehra. "Impact of Various Irrigation Sources on the Pattern of Crops and Resource Use at Different Sized Farm Holdings," Economic Affairs. Vol. 17, No. 7 (July 1972), pp. 333-41.



25. Gisser, M., and A. Mercado. "Economic Aspects of Ground Water Resources and Replacement Flows in Semi-Arid Agricultural Areas," American Journal of Agricultural Economics. Vol. 55, No. 3 (Aug. 1973), pp. 461-66.
26. \_\_\_\_\_. "Economic Aspects of Ground Water Resources and Replacement Flows in Semi-Arid Agricultural Areas: Reply," American Journal of Agricultural Economics. Vol. 56, No. 4 (Nov. 1974), pp. 832.
27. Guise, J. W. B., and J. C. Flinn. "The Allocation and Pricing of Water in a River Basin," American Journal of Agricultural Economics. Vol. 52, No. 3 (Aug. 1970), pp. 411-21.
28. Hanke, S. H., and R. K. Davis. "Potential for Marginal Cost Pricing in Water Resource Management," Water Resources Research. Vol. 9, No. 4 (Aug. 1973), pp. 808-25.
29. Hartman, L. M., and R. L. Anderson. "Estimating the Value of Irrigation Water from Farm Sales Data in Northeastern Colorado," Journal of Farm Economics. Vol. 44, No. 1 (Feb. 1962), pp. 207-13.
30. Heady, E. O., and K. J. Nicol. "Models of Land and Water Allocation to Improve Environment and Water Quality Through Soil Loss Controls," Water Resources Research. Vol. 11, No. 6 (Dec. 1975), pp. 795-800.
31. Howe, C. W. "Water Resources and Regional Economic Growth in the United States, 1950-60," Southern Economic Journal. Vol. 34, No. 4 (Apr. 1968), pp. 477-89.
32. Huffman, R. E. "Economic Implications of the Partnership Policy in Water Resources Development," Journal of Farm Economics. Vol. 38, No. 5 (Dec. 1956), pp. 1269-76.
33. Hutchins, W. A. "The Development and Present Status of Water Rights and Water Policy in the United States," Journal of Farm Economics. Vol. 37 (Dec. 1955), pp. 866-74.
34. \_\_\_\_\_. "Background and Modern Developments in Water Law in the United States," Natural Resources Journal. Vol. 2, No. 3 (Dec. 1962), pp. 416-44.
35. Kristjanson, K. "Institutional Arrangements in Water Resource Development," Land Economics. Vol. 30 (Nov. 1954), pp. 347-62.

36. Lane, M. N., and S. C. Littlechild. "Weather-Dependent Pricing for Water Resources in the Texas High Plains," Water Resources Research. Vol. 12, No. 4 (Aug. 1976), pp. 599-605.
37. Loughlin, J. C. "The Efficiency and Equity of Cost Allocation Methods for Multipurpose Water Projects," Water Resources Research. Vol. 13, No. 1 (Feb. 1977), pp. 8-14.
38. Lucke, J. B. "Minimizing the Operating and Capital Costs of Water Supply Projects," Water Resources Research. Vol. 12, No. 1 (Feb. 1976), pp. 101.
39. Lynne, G. D. "Water Price Responsiveness and Administrative Regulation: The Florida Example," Southern Journal of Agricultural Economics. Vol. 9, No. 1 (July 1977), pp. 137-43.
40. \_\_\_\_\_. "Issues and Problems in Agricultural Water Demand Estimation from Secondary Data Sources," Southern Journal of Agricultural Economics. Vol. 10, No. 2 (Dec. 1978), pp. 101-06.
41. McPherson, W. K. "Can Water be Allocated by Competitive Prices?" Journal of Farm Economics. Vol. 38, No. 5 (Dec. 1956), pp. 1259-68.
42. Mapp, H. P., Jr., and V. R. Eidman. "A Bioeconomic Simulation Analysis of Regulating Groundwater Irrigation," American Journal of Agricultural Economics. Vol. 58, No. 3 (Aug. 1976), pp. 391-402.
43. Martin, W. E., T. G. Burdak, and R. A. Young. "Projecting Hydrologic and Economic Interrelationships in Groundwater Basin Management," American Journal of Agricultural Economics. Vol. 51, No. 5 (Dec. 1969), pp. 1593-97.
44. Moore, C. V. "On the Necessary and Sufficient Conditions for Long Run Irrigated Agriculture," Water Research Bulletin. Vol. 8, No. 4 (Aug. 1972), pp. 802-12.
45. \_\_\_\_\_, J. H. Snyder, and P. Sun. "Effects of Colorado River Water Quality and Supply on Irrigated Agriculture," Water Resources Research. Vol. 10, No. 2 (Apr. 1974), pp. 137-44.
46. Olson, S. H. "Some Conceptual Problems of Interpreting the Value of Water in Human Regions," Water Resources Research. Vol. 2, No. 1 (first quarter 1966), pp. 1-11.

47. Sargent, F. O. "Economic Analysis in a Political Framework, (Water)," Journal of Soil and Water Conservation. Vol. 17, No. 2 (Mar./Apr. 1962), pp. 72-76.
48. Scherer, C. R. "Water Allocation and Pricing for Control of Irrigation Related Salinity in a River Basin," Water Resources Research. Vol. 13, No. 2 (Apr. 1977), pp. 225-38.
49. Timmons, J. F. "Theoretical Considerations of Water Allocation Among Competing Uses and Users," Journal of Farm Economics. Vol. 38, No. 5 (Dec. 1956), pp. 1244-58.
50. Trelease, F. J. "Water Law and Economic Transfers of Water," Journal of Farm Economics. Vol. 43, No. 5 (Dec. 1961), pp. 1147-52.
51. Turvey, R. "Analyzing the Marginal Cost of Water Supply," Land Economics. Vol. 52, No. 2 (May 1976), pp. 158-68.
52. Young, H. P., and R. P. Thompson. "Least Cost Allocation and Valuation Model for Water Resources," Water Resources Research. Vol. 9, No. 5 (Oct. 1973), pp. 1186-95.

U.S. Department  
of Agriculture

1. Anderson, R. L., and A. Maass. Simulation of Irrigation Systems, Effect of Water Supply and Operating Rules on Production and Income on Irrigated Farms. Tech. Bull. 1431. U.S. Dept. Agr., Econ. Res. Serv., Sept. 1974.
2. Skold, M. D. Farmer Adjustments to Higher Energy Prices. ERS-663. U.S. Dept. Agr., Econ. Res. Serv., Nov. 1977.
3. Sloggett, Gordon. Energy and U.S. Agriculture: Irrigation Pumping, 1974. AER-376. U.S. Dept. Agr., Econ. Res. Serv., Sept. 1977.
4. U.S. Department of Agriculture, Economic Research Service. Major Uses of Land and Water in the United States with Special Reference to Agriculture. AER-149. Nov. 1968.
5. \_\_\_\_\_, Economic Research Service. Our Land and Water Resources: Current and Prospective Supplies and Uses. MP-1290. May 1974.

Experiment Stations

1. Anderson, D. O., N. R. Cook, and D. D. Badger. Estimation of Irrigation Water Values in Western Oklahoma. Okla. Agr. Exp. Sta. P-528, Feb. 1966.



2. Barrett, W. C., and C. H. Milligan. Consumptive Water Use and Requirements in the Colorado River Area of Utah. Utah Agr. Exp. Sta. Spec. Rep. 8, Mar. 1953.
3. Beattie, B. R., and others. Economic Consequences of Interbasin Water Transfers. Oreg. Agr. Exp. Sta. Tech. Bull. 116, June 1971.
4. Brewer, M. F. Water Pricing and Allocation with Particular Reference to California Irrigation Districts. Giannini Found. Agr. Econ. Rep. 235, Oct. 1960.
5. Castle, E. N., and K. H. Lindborg. The Economics of Ground Water Allocation With Particular Reference to the Milton-Freewater Area of Oregon: A Methodological Investigation. Oreg. Agr. Exp. Sta. MP-108, Apr. 1961.
6. Clark, R. T. Water Uses in the North Platte River Basin of Wyoming. Wyo. Agr. Exp. Sta. Res. Jour. 4, Jan. 1967.
7. Davis, I. F. Colorado's Ground-Water Problems: The Economic Picture. Colo. Agr. Exp. Sta. B-506-S, June 1960.
8. Davis, K. C., and J. F. Meek. Economics of Ground Water Development on Farms in Southwest Oklahoma. Okla. Agr. Exp. Sta. B-499, Nov. 1957.
9. Dickerson, J. D., G. H. Larson, and J. W. Funk. Irrigated Water Costs Correlated With Total Pumping Lift. Kans. Agr. Exp. Sta. Rep. 93, Mar. 1964.
10. Dobbs, T. L. Feasibility Studies in Water Resource Planning. Wyo. Agr. Exp. Sta. Bull. 579, Sept. 1972.
11. Eidman, V. R. Economic Efficiency in the Allocation of Water Over Time, July, 1967-Dec. 1971. Okla. State Univ. Agr. Exp. Sta. Tech. Bull. B-010, Aug. 1972.
12. Gardner, B. D., and H. H. Fullerton. Rising Water Values That Result from Increased Mobility. Utah Agr. Exp. Sta. Bull. 476, Oct. 1968.
13. Harmon, W. L., W. M. Hughes, and J. W. Graves. An Economic Analysis of Alternative Water Supply Programs in a Specific Resource Situation, Texas High Plains. Tex. Agr. Exp. Sta. MP-822, Dec. 1966.

14. Hartman, L. M., and R. L. Anderson. Estimating Irrigation Water Values; a Regression Analysis of Farm Sales Data From Northeastern Colorado. Colo. Agr. Exp. Sta. Tech. Bull. 81, Nov. 1963.
15. Hedges, T. R. Water Supplies and Cost in Relation to Farm Resource Use Decisions and Profits on Sacramento Valley Farms. Giannini Found. Agr. Econ. Res. Rep. 320, 1974.
16. Hileman, E., and J. Martin. The Economic Impact of Investment in Water Resources: A Comparative Analysis of the Tennessee Valley With Surrounding Areas of Six Southeastern States. Tenn. Agr. Exp. Sta. P-557, Apr. 1976.
17. Houston, C. E. Consumptive Use of Irrigation Water by Crops in Nevada. Nev. Agr. Exp. Sta. B-185, June 1950.
18. Hughes, W. F., and A. C. Magee. Changes in Investment and Irrigation Water Costs, Texas High Plains, 1950-1954. Tex. Agr. Exp. Sta. B-828, Mar. 1956.
19. Jeffrey, A. D. Economics of Water Supply in Rhode Island. R.I. Agr. Exp. Sta. MP-62, July 1966.
20. Jensen, M. C., G. C. Lewis, and G. O. Baker. Characteristics of Irrigation Waters in Idaho. Idaho Agr. Exp. Sta. Res. Bull. 19, Feb. 1951.
21. Johnson, R. B., and W. P. Hobgood. Cost Analysis of Rural Water Systems. La. Agr. Exp. Sta. DAE Res. Rep. 483, May 1975.
22. Long, R. B., and W. C. Bailey. The Economic Water Supply in Idaho. Univ. Idaho Agr. Exp. Sta. Res. Bull. 92, Apr. 1976.
23. Lyon, D. K. Energy Demand and Water Resource Management; Some Economic Aspects (Cost Models). Cornell Agr. Exp. Sta. 75-32, Dec. 1975.
24. Magee, A. C., and others. Cost of Water for Irrigation on the High Plains. Tex. Agr. Exp. Sta. B-745. Feb. 1952.
25. Martin, W. E., and M. A. Boster. Economic Analysis of the Conjunctive Use of Surface Water and Ground Water of Differing Prices and Qualities; A Coming Problem for Arizona Agriculture. Ariz. Agr. Exp. Sta. Tech. Bull. 235, 1977.

26. Miller, S. F., L. L. Boersma, and E. N. Castle. Irrigation Water Values in the Willamette Valley: A Study of Alternative Valuation Methods. Oreg. Agr. Exp. Sta. Tech. Bull. 85, Sept. 1965.
27. Nohre, C. O., and P. M. Raup. Regulation of Water Use in Minnesota Agriculture. Minn. Agr. Exp. Sta. B-453, Mar. 1961.
28. Osborn, J. E. Economic Analysis: Interindustry Effects of a Declining Groundwater Supply: Southern High Plains of Texas. Tex. Agr. Exp. Sta. B-1134, June 1973.
29. Schmid, A. A. Michigan Water Use and Development Problems. Mich. Agr. Exp. Sta. CR-230, January 1961.
30. Tomlinson, B. R. Estimate of Water Requirements for Crops. Wyo. Agr. Exp. Sta. B-303, Feb. 1951.
31. Waldrop, J. E., and D. D. Badger. Effects of Upstream Watershed Development on Prices and Values of Farmland in the Upper Washita River Basin. Okla. Agr. Exp. Sta. P-529, Mar. 1966.
32. Ware, L. M., and W. A. Johnson. Value of Irrigation With Different Fertility Treatments for Vegetable Crops. Ala. Agr. Exp. Sta. B-276, June 1950.

Ph.D. Dissertations

1. Anderson, D. O. "The Value of Irrigation Water in the Washita River Basin of Roger Mills County, Oklahoma." Ph.D. Dissertation. Okla. State Univ., 1965.
2. Arnold, A. F. "Potential Economic Effects of Upstream Flood Control and Irrigation Development: Boggy Creek Watershed Oklahoma." Ph.D. Dissertation. Okla. State Univ., 1962.
3. Bekure, S. "An Economic Analysis of Intertemporal Allocation of Ground Water in the Central Ogallala Formation." Ph.D. Dissertation. Okla. State Univ., 1971.
4. Caglar, M. "Optimization of Intra-seasonal Water Allocation." Ph.D. Dissertation. Iowa State Univ., 1974.
5. Casey, J. E., Jr. "A Regional Adjustment Model to Estimate the Economic Implications of Declining Groundwater in the High Plains." Ph.D. Dissertation. Tex. A & M Univ., 1978.



6. Fletcher, R. R. "The Impact of Economic Development on Water Resource Use." Ph.D. Dissertation. Okla. State Univ., 1971.
7. Gates, J. M. "Repayment and Pricing in Water Policy: A Regional Economic Analysis with Particular Reference to the Tehachapi-Cummings County Water District." Ph.D. Dissertation. Univ. Calif. (Berk.), 1969.
8. Harman, W. L. "Evaluating the Growth Potential of Irrigated Farms With Diminishing Water Supplies: A Multiple Goals Approach to Decision-Making." Ph.D. Dissertation. Okla. State Univ., 1973.
9. Hiskey, H. H. "Optimal Allocation of Irrigation Water: The Sevier River Basin." Ph.D. Dissertation. Utah State Univ., 1972.
10. Hoek, K. J. "Agricultural Adjustments to a Falling Groundwater Table in Central Arizona." Ph.D. Dissertation. Univ. Ariz., 1973.
11. Horowitz, U. "A Dynamic Model Integrating Demand and Supply Relationships for Agricultural Water, Applied to Determining Optimal Intertemporal Allocation of Water in A Regional Water Project." Ph.D. Dissertation. Iowa State Univ., 1974.
12. Huffman, R. E. "Economics of Irrigation Development and Public Water Policy." Ph.D. Dissertation. Purdue Univ., 1952.
13. Jones, D. M. "Economic Aspects of Agricultural Use of Colorado River Water in Yuma County, Arizona." Ph.D. Dissertation. Univ. Ariz., 1968.
14. Kleinman, A. P. "The Production Function and the Imputation of the Economic Value of Irrigation Water." Ph.D. Dissertation. Iowa State Univ., 1969.
15. Kraft, D. F. "Economics of Agricultural Adjustments to Water Quality Standards in an Irrigated River Basin." Ph.D. Dissertation. Wash. State Univ., 1975.
16. Lewis, C. B. "Allocating a Limited Supply of Water for Irrigation." Ph.D. Dissertation. Univ. Neb., 1969.
17. Lindeborg, K. H. "Economic Effects of Different Allocations of Ground Water Within Agriculture in the Milton-Freewater Area of Oregon." Ph.D. Dissertation. Oreg. State College, 1959.

18. Little, H. C. "Determination and Analysis of the Demand for Water Diverted from the Truckee River for Agricultural Use." Ph.D. Dissertation. Univ. Mo., 1965.
19. McKusick, R. B. "An Economic Evaluation of Benefit Cost Analysis With Special Reference to the Derived Demand for Irrigation Water for Tree Fruits and Nuts, and Grapes in California." Ph.D. Dissertation. Univ. Calif. (Davis), 1973.
20. Madsen, H. C. "Future Water and Land Supply-Demand Balances for U.S. Agriculture: A Spatial Analysis Incorporating Producing Areas, Consuming Regions and Water Supply Regions." Ph.D. Dissertation. Iowa State Univ., 1972.
21. Mapp, H. P., Jr. "An Economic Analysis of Water-Use Regulation in the Central Ogallala Formation." Ph.D. Dissertation. Okla. State Univ., 1972.
22. Matson, R. A. "The Pricing of Irrigation Water Output on Federal Projects, With a Case Study of the Colorado-Big Thompson Project." Ph.D. Dissertation. Univ. Colo., 1965.
23. Meyer, N. L. "Interregional Impacts of Alternative Water Policies for Irrigation in the Western United States: A Quantitative Assessment." Ph.D. Dissertation. Univ. Wis., 1974.
24. Miller, S. F. "An Investigation of Alternative Methods of Valuing Irrigation Water." Ph.D. Dissertation. Oreg. State Univ., 1965.
25. Moore, Charles L. "Economic Analysis of Farm Water Supply in Washington County, Illinois." Ph.D. Dissertation. Univ. Ill., 1972.
26. Nelson, D. M. "The Value of Water for Irrigation in the Kansas River Valley." Ph.D. Dissertation. Kans. State Univ., 1968.
27. Notoatmodjo, B. "A Test of the Use of Ramsey Optimal Pricing for Municipal, Industrial, and Irrigation Water in Logan, Utah." Ph.D. Dissertation. Utah State Univ., 1978.
28. Oboh, D. O. "Economies of Size and Socio-Economic Impacts of Rural Water Districts in Oklahoma." Ph.D. Dissertation. Okla. State Univ., 1974.

29. Ozsabuncuoglu, I. H. "Economic Impacts of Alternative Irrigation Systems Under Increasing Irrigation Water Costs in Southeastern Arizona." Ph. D. Dissertation. Univ. Ariz., 1977.
30. Ramgolam, R. "The Pricing of Water in Louisiana." Ph.D. Dissertation. La. State Univ., 1974.
31. Schmid, A. A. "Water Allocation and Development in Wisconsin." Ph.D. Dissertation. Univ. Wis., 1959.
32. Schuy, D. F. "Criteria for the Allocation of Public Waters." Ph.D. Dissertation. Wash. State Univ., 1976.
33. Scott, F. S., Jr. "An Economic Analysis of Irrigation Development With Particular Reference to Multiple-Purpose Development of the Truckee-Carson River System in Western Nevada." Ph.D. Dissertation. Univ. Ill., 1954.
34. Thomas, H. R. "Economic Productivity of Water and Related Inputs in the Agriculture of Southern Idaho." Ph.D. Dissertation. Oreg. State Univ., 1974.
35. Thorson, N. W. "Conjunctive Management of Ground and Surface Waters: A Legal-Economic Analysis." Ph.D. Dissertation. Univ. Neb., 1979.
36. Turna, K. S. "Allocation of Water Between Agriculture and Energy Sectors and Underlying Efficiency Aspects of Transfer Mechanisms." Ph.D. Dissertation. Utah State Univ., 1979.
37. Young, K. B. "Optimal Use of Ground and Surface Water in the Gallatin Valley, Montana." Ph.D. Dissertation. Mont. State Univ., 1971.

#### M.S. Theses

1. Anderson, M. H. "An Economic Analysis of Demand and Supply for Irrigation Water in Utah: A Linear Programming Approach." M.S. Thesis. Utah State Univ., 1974.
2. Asopa, Vijendra N. "An Application of Mathematical Decision Theory to the Economic Evaluation of Water Use in Crop Production." M.S. Thesis. Univ. Ill., 1971.
3. Bailey, W. C. "Economic Evaluation of Idaho's Water Supply." M.S. Thesis. Univ. Idaho, 1975.



4. Barton, D. G. "Economics of Water Supply in the Upper White River Basin: A Reconnaissance Investigation." M.S. Thesis. Purdue Univ., 1970.
5. Cacek, R. D. "Irrigation Water Supply: Efficiency and Cost Aspects." M.S. Thesis. Univ. Neb., 1970.
6. Cross, E. D. "Supply and Value of Irrigation Water in Arkansas." M.S. Thesis. Univ. Ark., 1976.
7. Davis, J. W. "The Economies of a Comprehensive Water Supply System for Spencer County, Indiana." M.S. Thesis. Purdue Univ., 1975.
8. DeTray, D. N. "Simulation as a Technique for Evaluating Water in Competing Uses." M.S. Thesis. Utah State Univ., 1968.
9. Fife, M. L. "The Values of Water in Cache County, Utah." M.S. Thesis. Utah State Univ., 1968.
10. Frank, M. D. "The Economic Value of Irrigation Water in the Western United States: An Application of Ridge Regression." M.S. Thesis. Tex. A & M Univ., 1979.
11. Fullerton, H. H. "Transfer Restrictions and Misallocation of Water Resources." M.S. Thesis. Utah State Univ., 1966.
12. Giles Saez, A. H. "Economics of Allocating Limited Water Supplies Within the Farm With Special Reference to Escalante Valley, Utah." M.S. Thesis. Utah State Univ., 1959.
13. Johnson, R. L. "An Investigation of Methods for Estimating Marginal Values of Irrigation Water." M.S. Thesis. Utah State Univ., 1967.
14. Keith, J. E. "The Economic Efficiency of Inter-Basin Transfers of Agricultural Water in Utah: A Mathematical Programming Approach." M.S. Thesis. Utah State Univ., 1973.
15. Lakawathana, S. "An Application of Statistical Decision Theory to Farm Management in Sevier County, Utah." M.S. Thesis. Utah State Univ., 1970.
16. Maher, M. J. "The Economic Value of Water in Different Uses Within Agriculture." M.S. Thesis. Univ. Idaho, 1967.

17. Owen, J. R. "Irrigation Water Values-Portions of Wyomong's Tongue and Ponder River Basin-A Budgeting and Linear Programming Analysis." M.S. Thesis. Univ. Wyo., 1971.
18. Sorenson, J. N. "The Marginal Value of Irrigation Water on Two Areas of Southeastern Wyoming." M.S. Thesis. Univ. Wyo., 1968.
19. Turner, J. M. "Marginal Value of Water in Arizona." M.S. Thesis. Colo. State Univ., 1971.
20. Wilder, D. B. "Marginal Values of Water Used in Irrigation of Citrus in the Central Ridge Section of Florida." M.S. Thesis. Univ. Fla., 1972.
21. Williams, J. N. "An Estimation of the Agricultural Demand for Water in Dade County, Florida." M.S. Thesis. Univ. Fla., 1976.
22. Wilson, D. L. "Some Methodological Problems in the Economic Appraisal of Increments of Irrigation Water." M.S. Thesis. Utah State Univ., 1967.





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